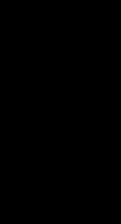
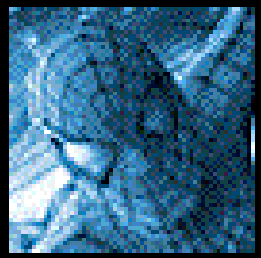
User Experience: Adopting Aqua

Session 002



User Experience: Adopting Aqua



John “Aquaman” Geleynse
User Experience Evangelist

Overview

- Citizenship
- Understanding your benefits
- Focusing on the details
- Testimonials

Finder File Edit View Go Window Help
11:23 AM
as Columns
as Icons
as List
Clean Up
Arrange by Name
Hide Toolbar ⌘B
Customize Toolbar...
Show Status Bar
Show View Options ⌘J
Documents
Back View Computer Home Favorites Applications My Project
Homework
Ladybug
Star Fish
MP3
Jazz
Read me
QuickTime Player
00:12:23
untitled document
Save as: Flowers
Where: Documents
Save Image Preview
Cancel Save
TextEdit
pdf

Citizenship

Noun

1. The status of a citizen with benefits and responsibilities
2. Conduct as a citizen; “award for good citizenship”

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Citizenship

Noun

1. The status of a citizen with benefits and responsibilities
2. Conduct as a citizen; “award for good citizenship”

Your Benefits . . .

- Reduced support costs
- Positive product reviews
- Competitive advantage
- Simplified documentation
- Positive branding
- Satisfied customers
- Upgrade revenue

Citizenship

Noun

1. The status of a citizen with benefits and responsibilities
2. Conduct as a citizen; “award for good citizenship”

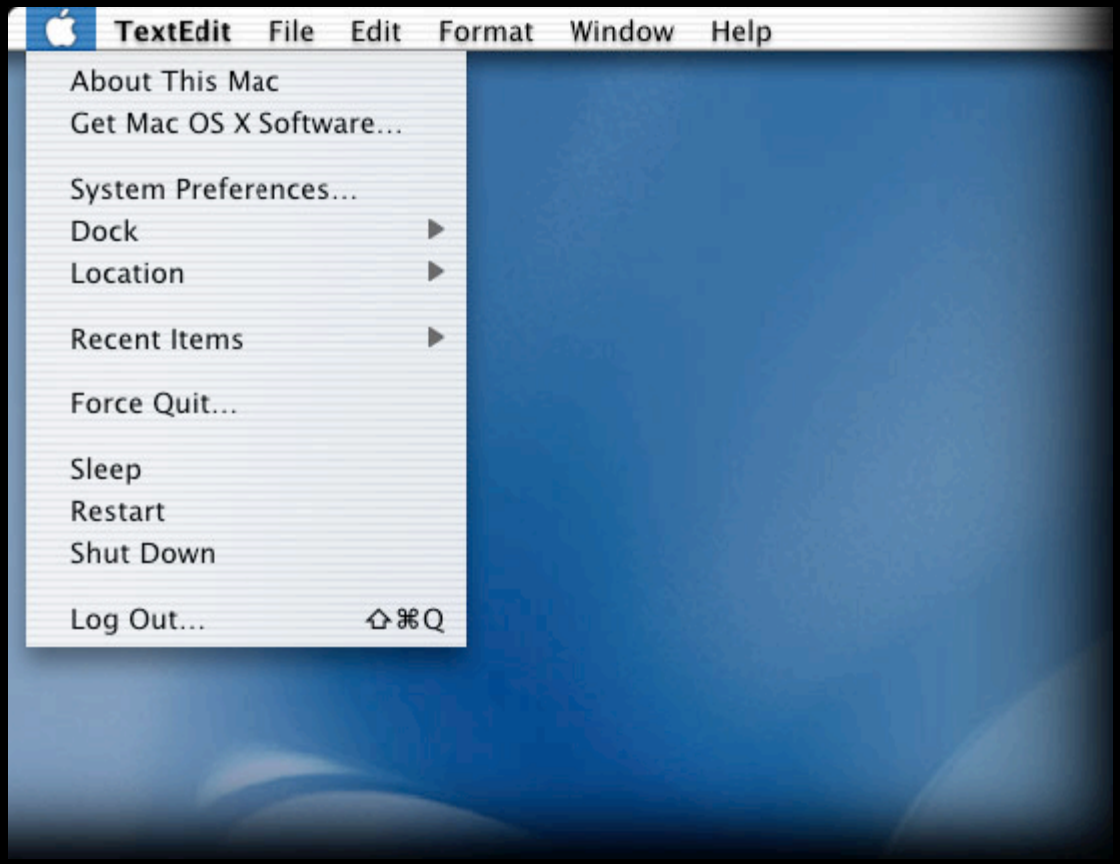
Your Responsibilities

- The basics
- Behaviors
- Appearance

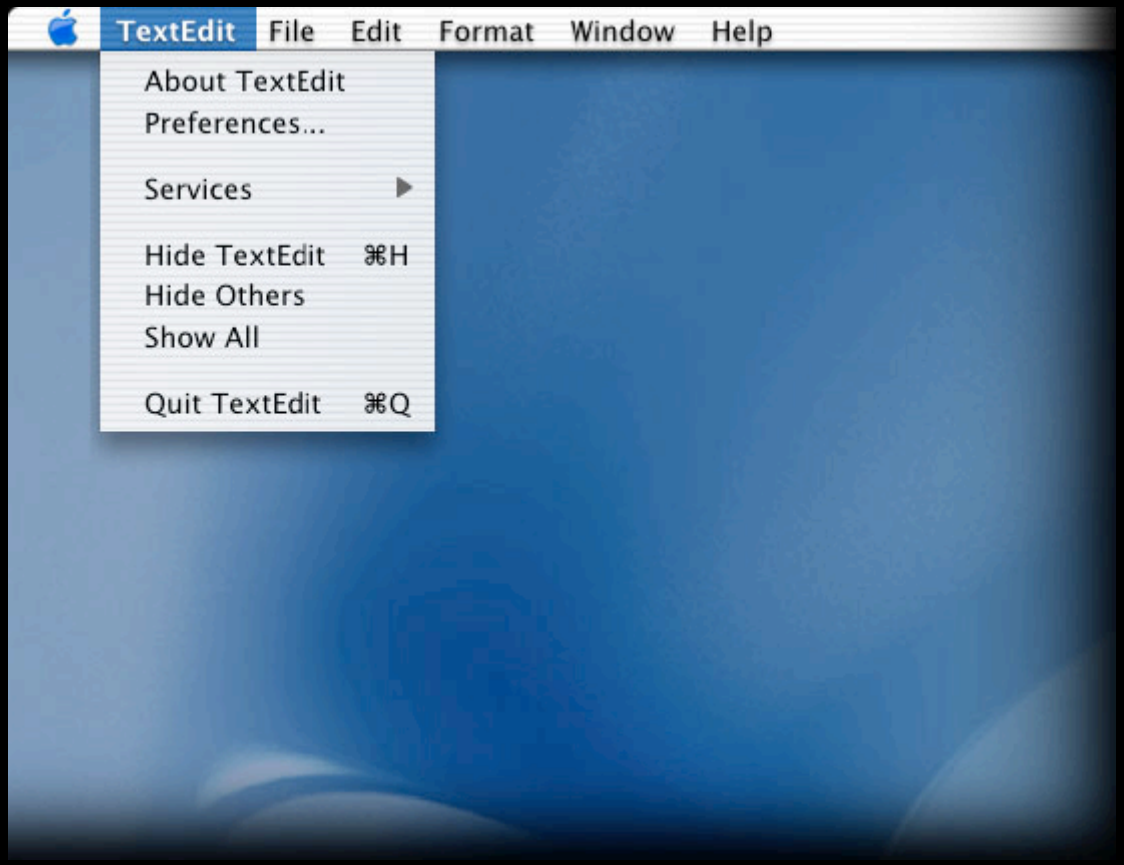
Your Responsibilities

- The basics
- Behaviors
- Appearance

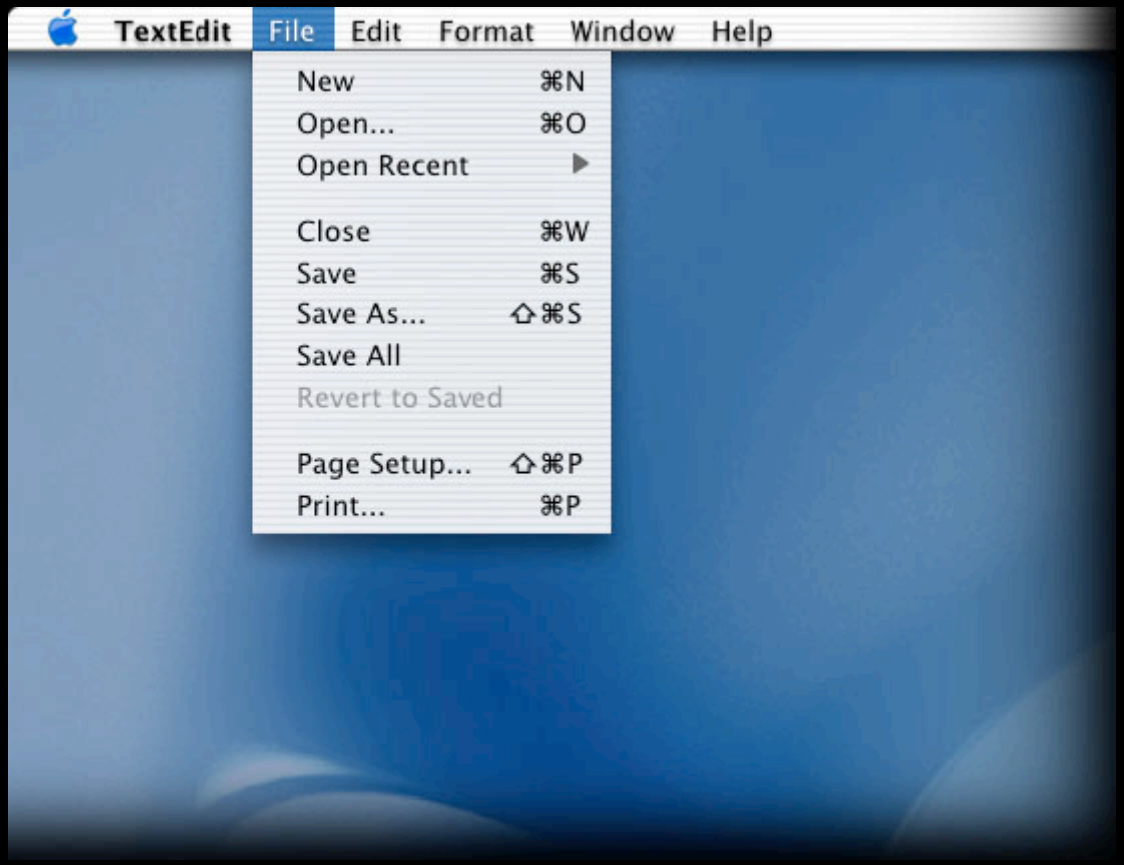
Menu Basics and Hierarchy



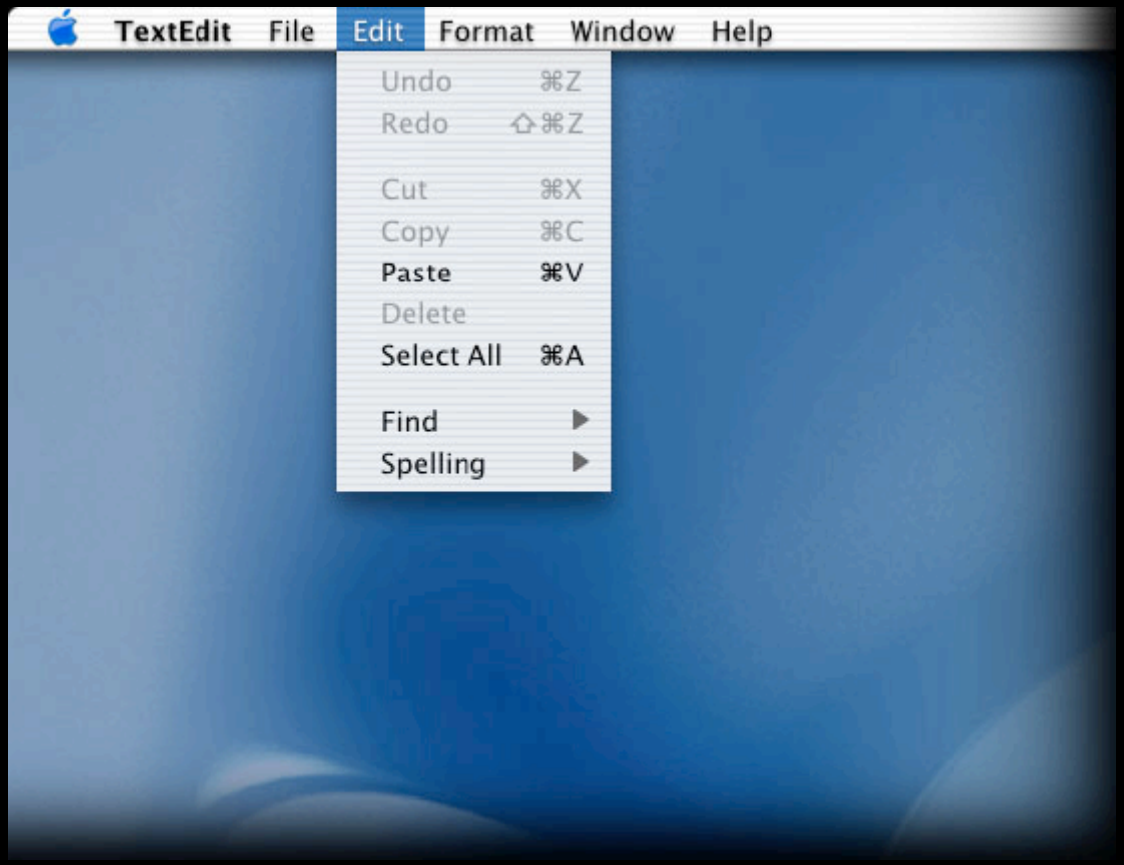
Application Menu



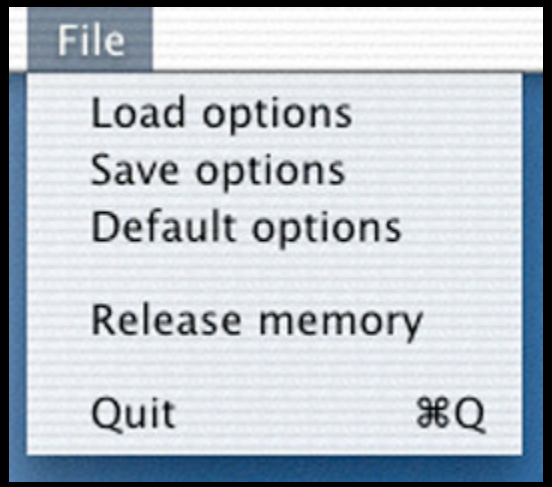
Document-centric File Menu

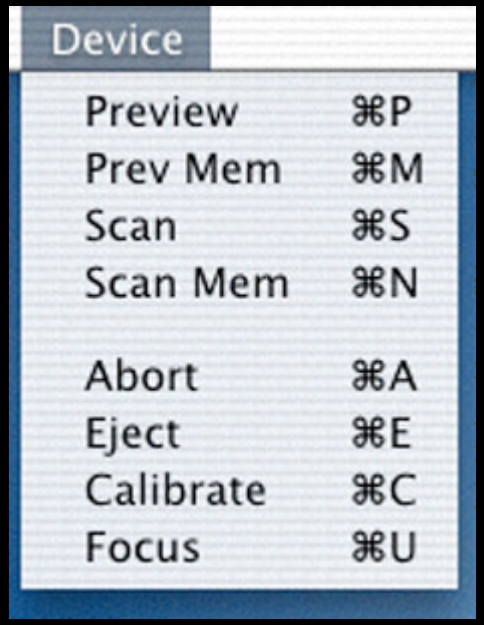


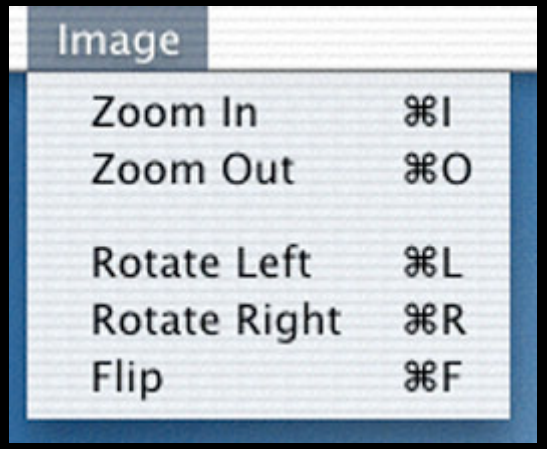
Document Content



Reserved Keyboard Equivalents

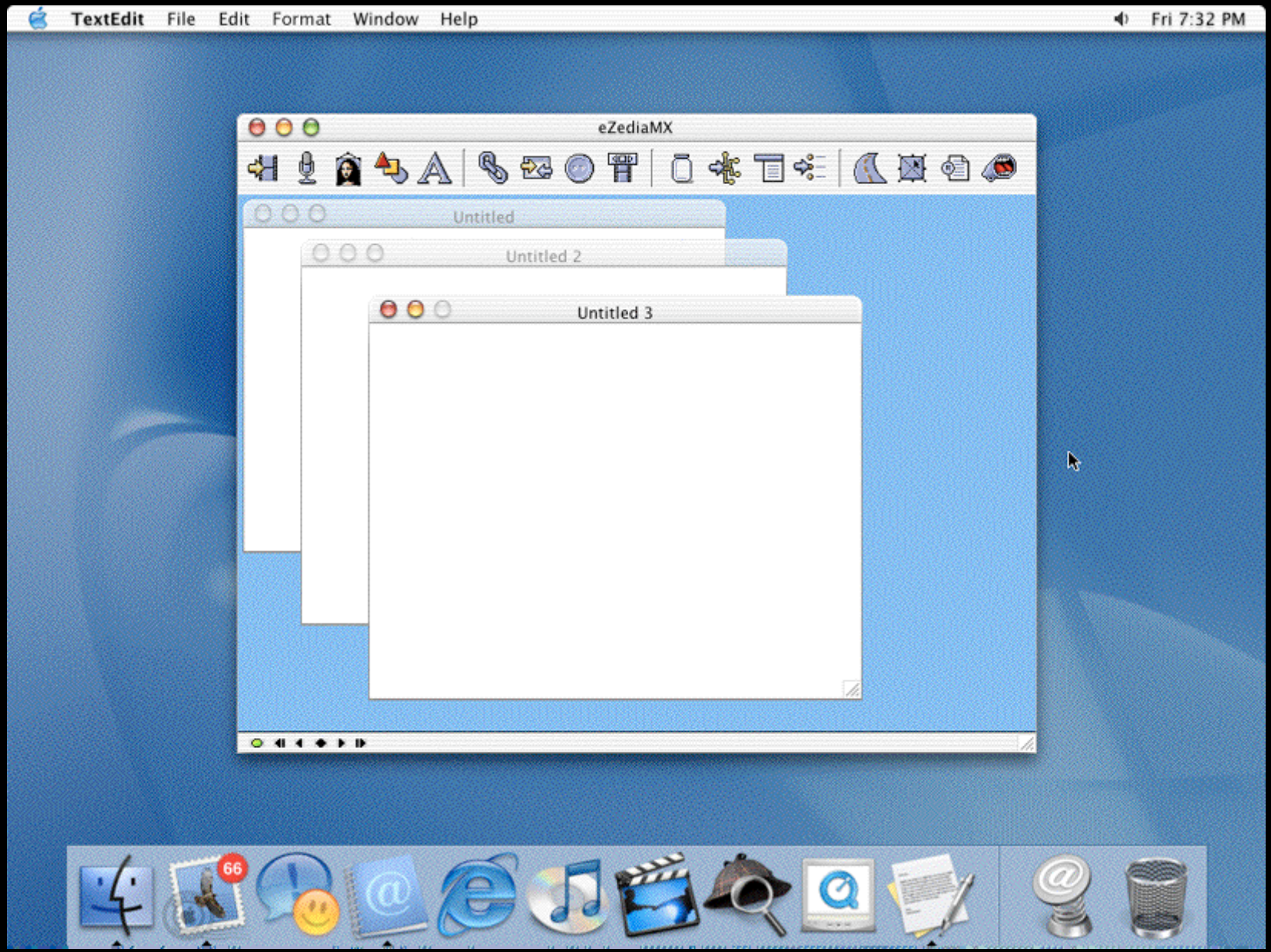


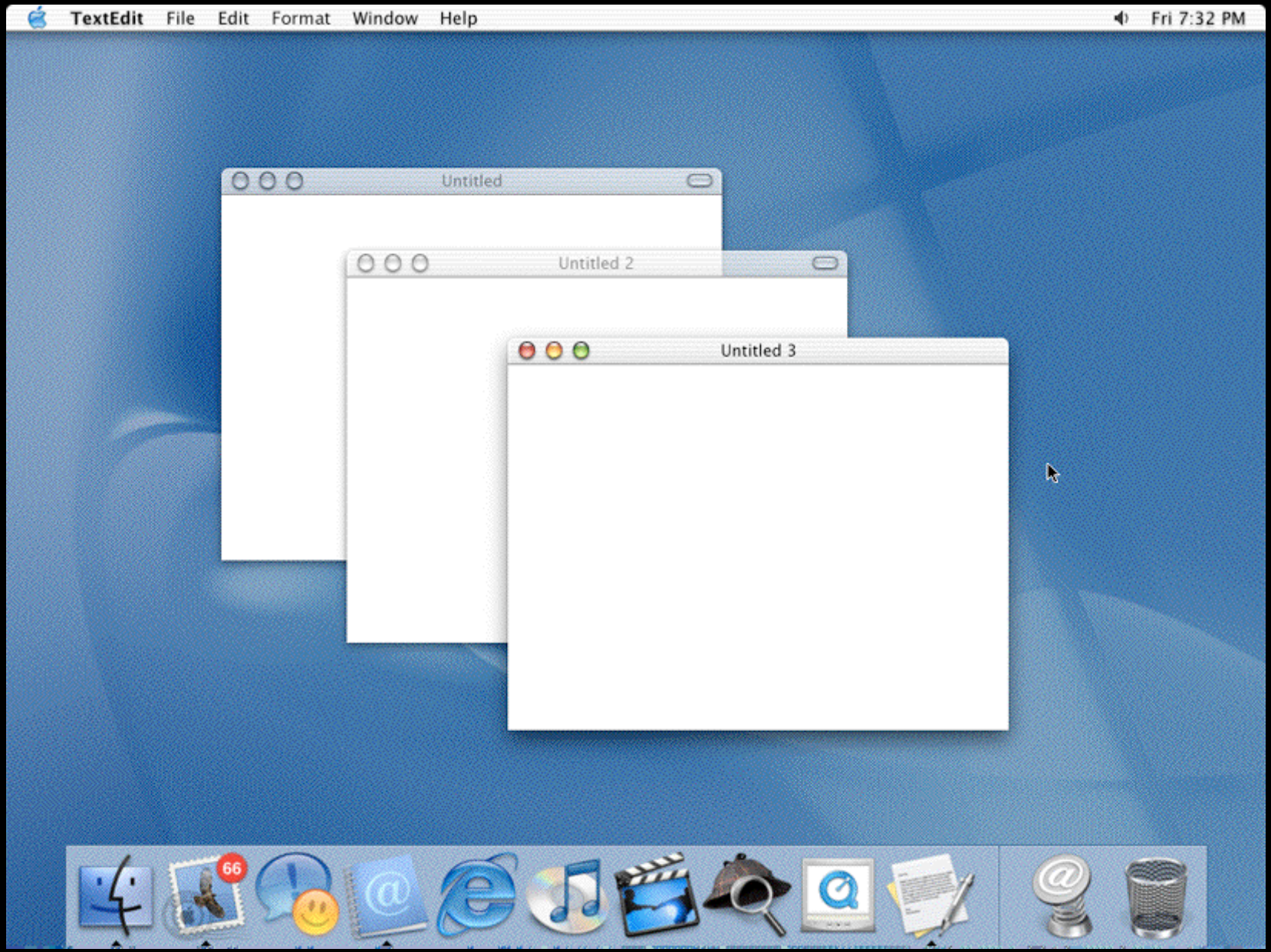




Windows

Finder File Edit View Go Window Help
11:23 AM
as Columns
as Icons
as List
Clean Up
Arrange by Name
Hide Toolbar ⌘B
Customize Toolbar...
Show Status Bar
Show View Options ⌘J
Documents
Back View Computer Home Favorites Applications My Project
Homework
Ladybug
Star Fish
MP3
Jazz
Read me
QuickTime Player
00:12:23
untitled document
Save as: Flowers
Where: Documents
Save Image Preview
Cancel Save
TextEdit
pdf


TextEdit
File
Edit
Format
Window
Help
Fri 7:32 PM
eZediaMX
Untitled
Untitled 2
Untitled 3
66


TextEdit
File
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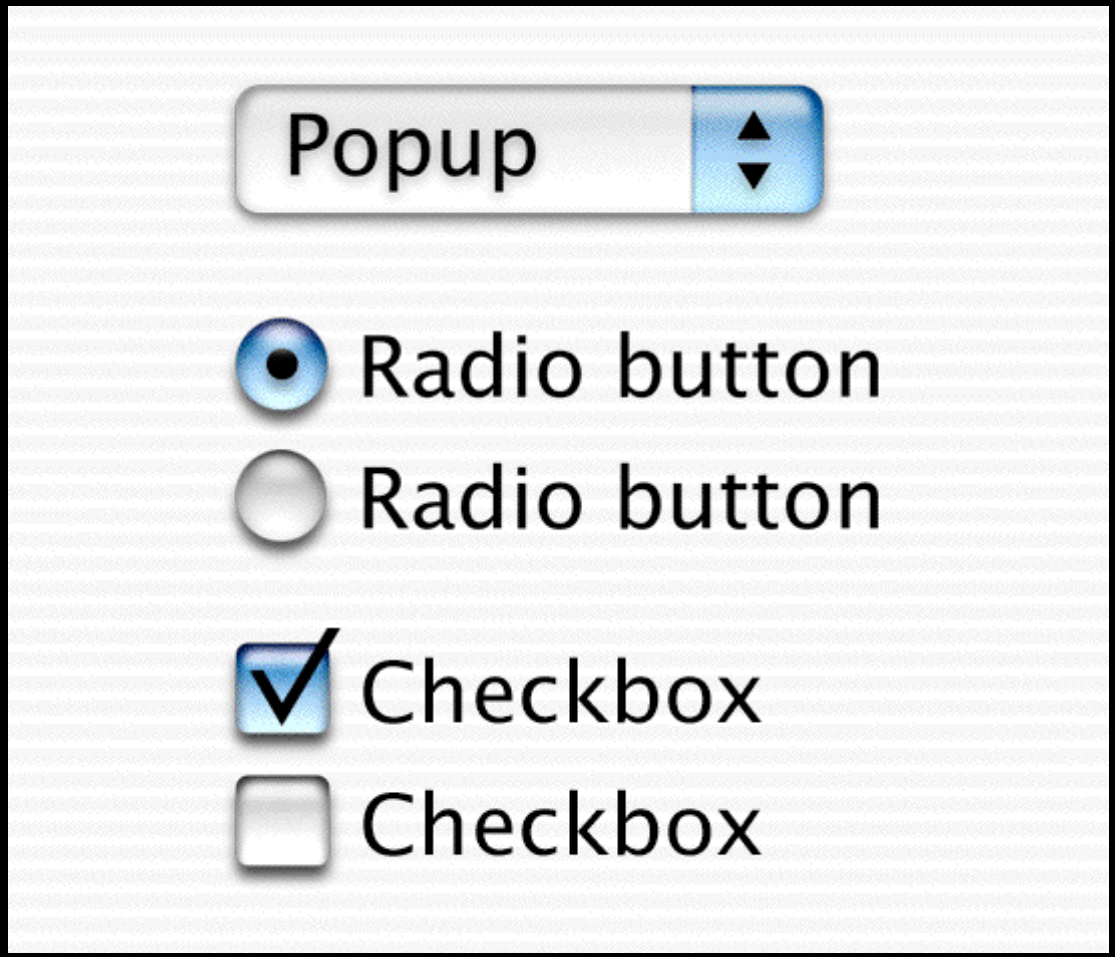
Window
Help
Fri 7:32 PM
Untitled
Untitled 2
Untitled 3
66

Controls



Carbon Combo Box

- Carbon

  <HIView.h>

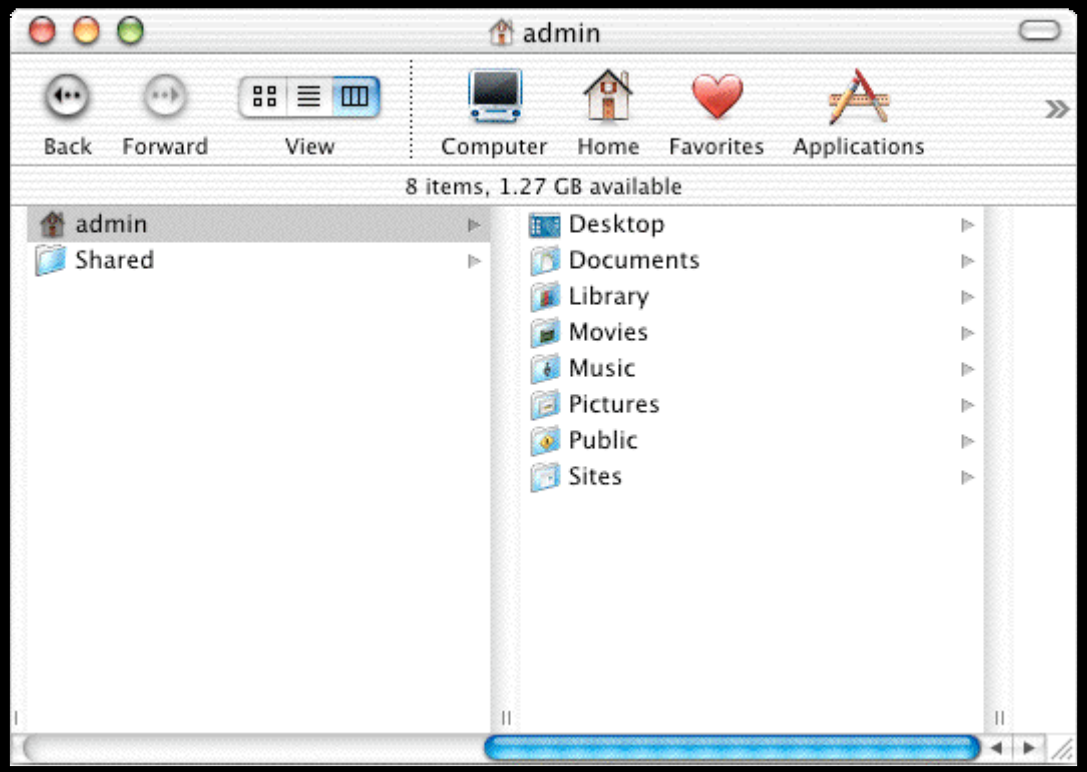
  HIComboBox…Create()

- Cocoa

  NSComboBox

Standard Alerts

Honor Default Folders



Avoid the Documents Folder

- It's only for user-created documents
- Use Library folder for application-support files
- Train users to back up their home folder

Your Responsibilities

- The basics
- Behaviors
- Appearance

Work With the Dock

- *All* applications should
  - Handle Dock clicks properly
  - Respect the Dock's location
- *Some* applications should
  - Provide status information via the Dock

Handle Dock Clicks Properly

- Always produce a window
- Document-based applications:
  - Open an untitled document window or activate the last minimized window
- Non-document-based applications:
  - Show the main application window
- Carbon: **ReopenApplication** AppleEvent
- Cocoa: Handled automatically

Respect the Dock's Location

Respect the Dock's Location

- Only for new and resized windows
- Users can change the Dock's location
- Carbon

  GetAvailableWindowPositioningBounds()
- Cocoa

  [NSScreen visibleFrame]

Status Info Via the Dock

Status Info Via the Dock

Status Info Via the Dock

- Carbon

  MacWindows.h

  Application.h

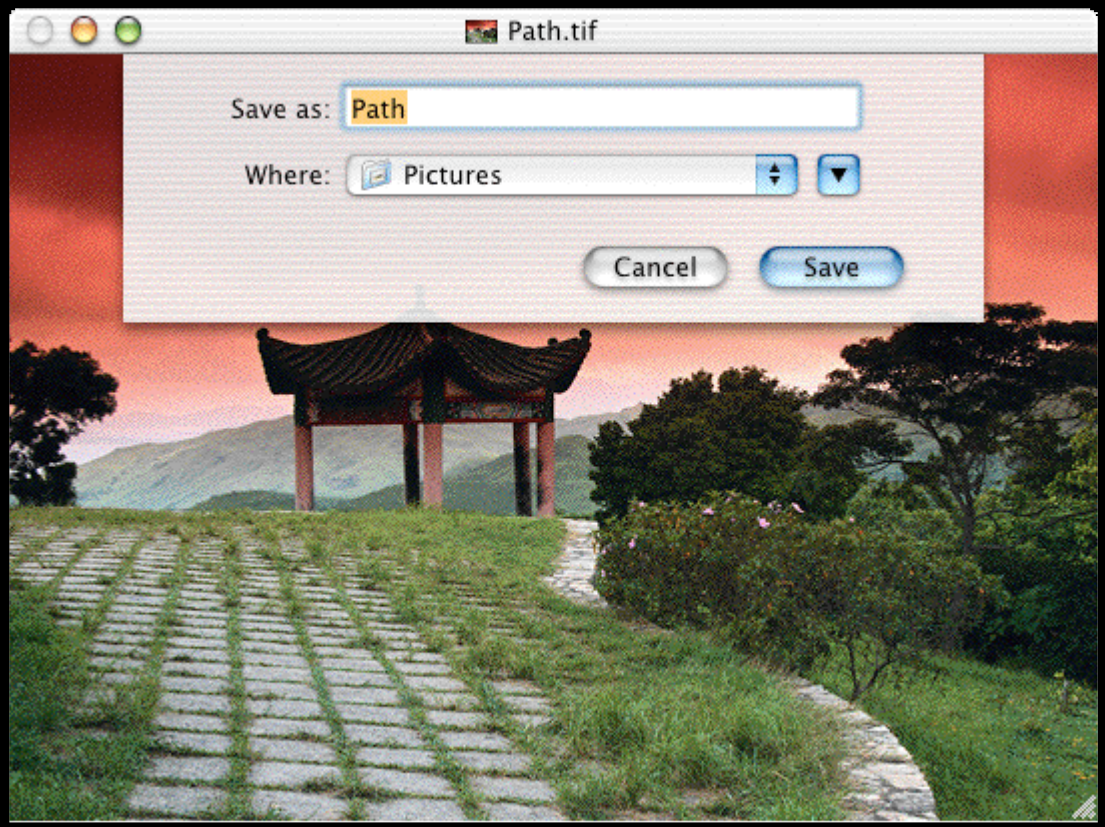
  …DockTile…()

- Cocoa

  [NSApplication setApplicationIcon:]

Sheets

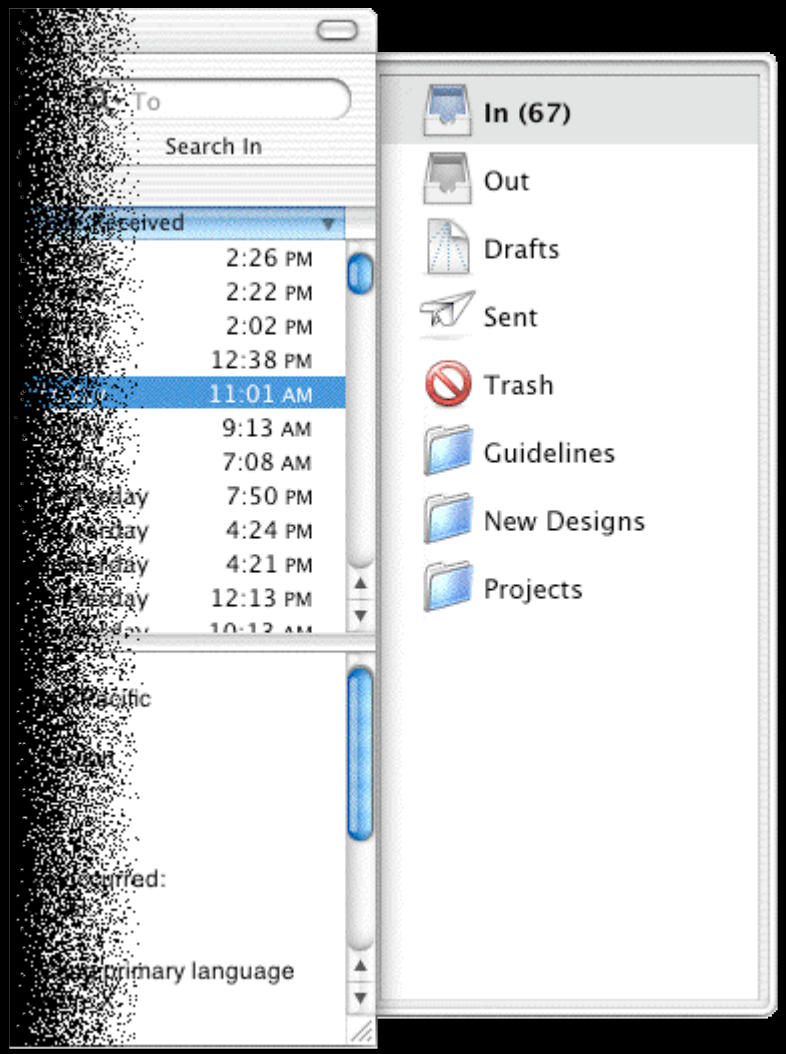
- For a dialog that applies to a single window or document



Drawers

Drawers provide:

- Often-used controls that do not need to be visible all the time
- Additional functionality closely related to the parent window



Now Available in Carbon!

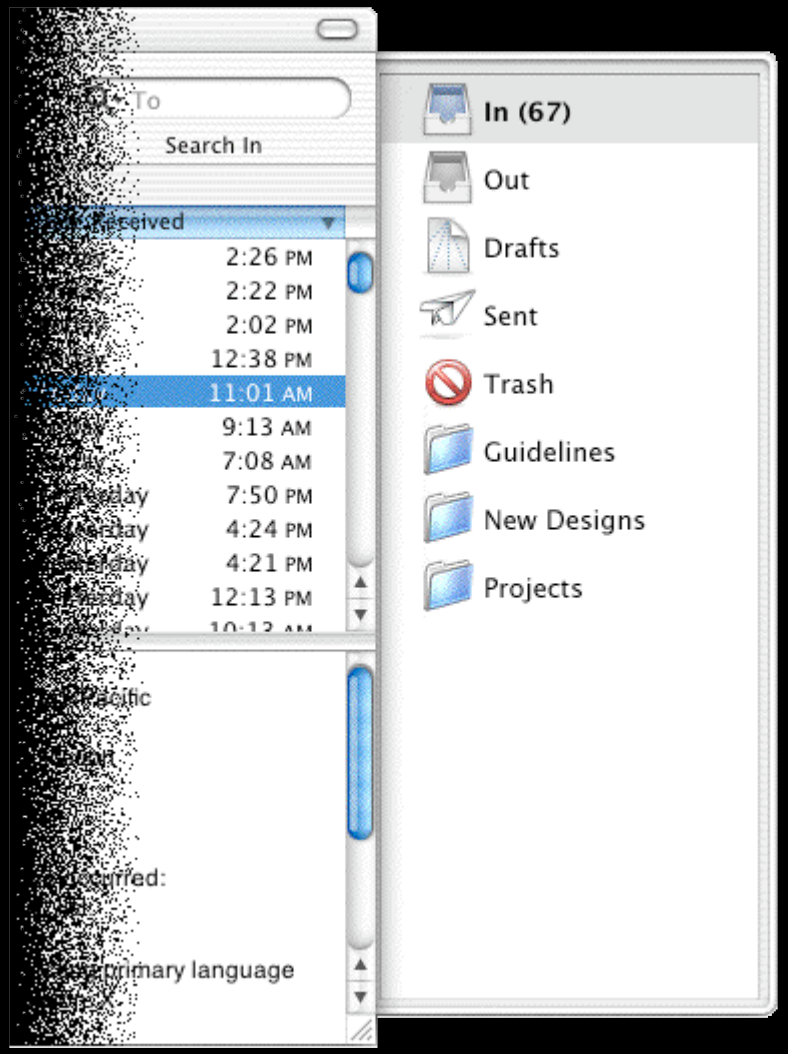
NEW

- Carbon
  - New window type

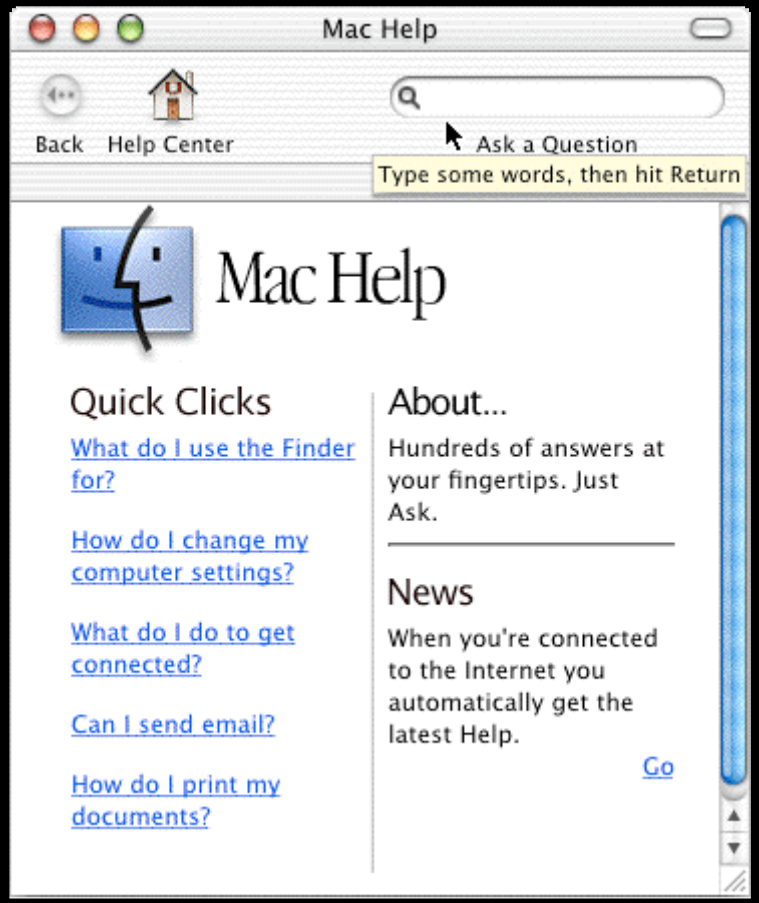
    <MacWindows.h>

    …Drawers…
- Cocoa

  NSDrawer



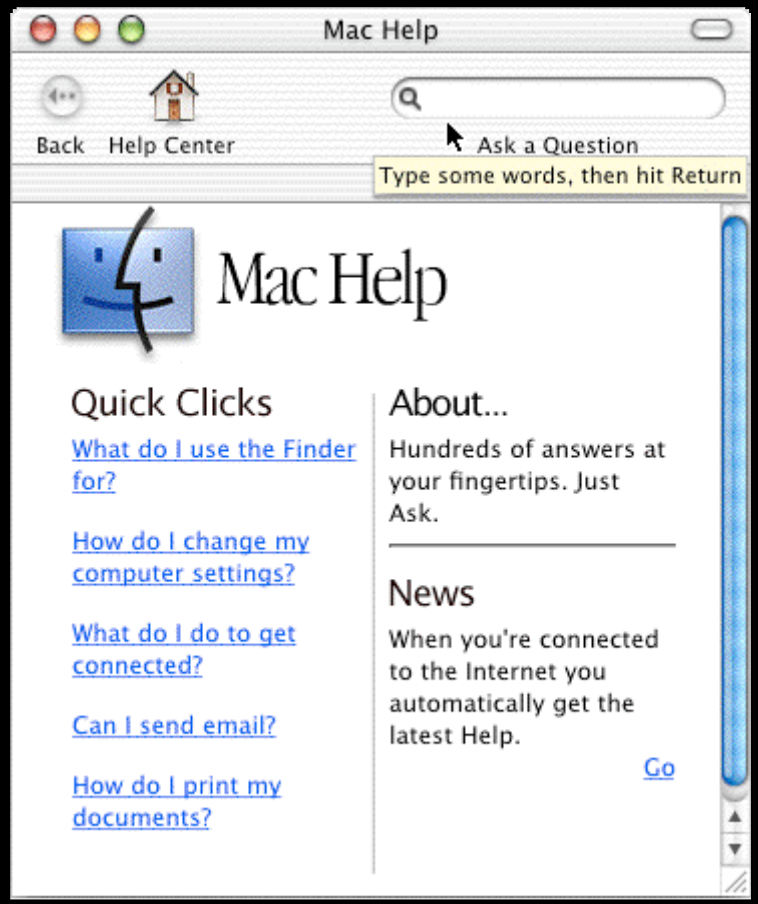
Apple Help


Mac Help
Back
Help Center
Ask a Question
Type some words, then hit Return
Mac Help
Quick Clicks
What do I use the Finder for?
How do I change my computer settings?
What do I do to get connected?
Can I send email?
How do I print my documents?
About...
Hundreds of answers at your fingertips. Just Ask.
News
When you're connected to the Internet you automatically get the latest Help.
Go

New in Apple Help

NEW

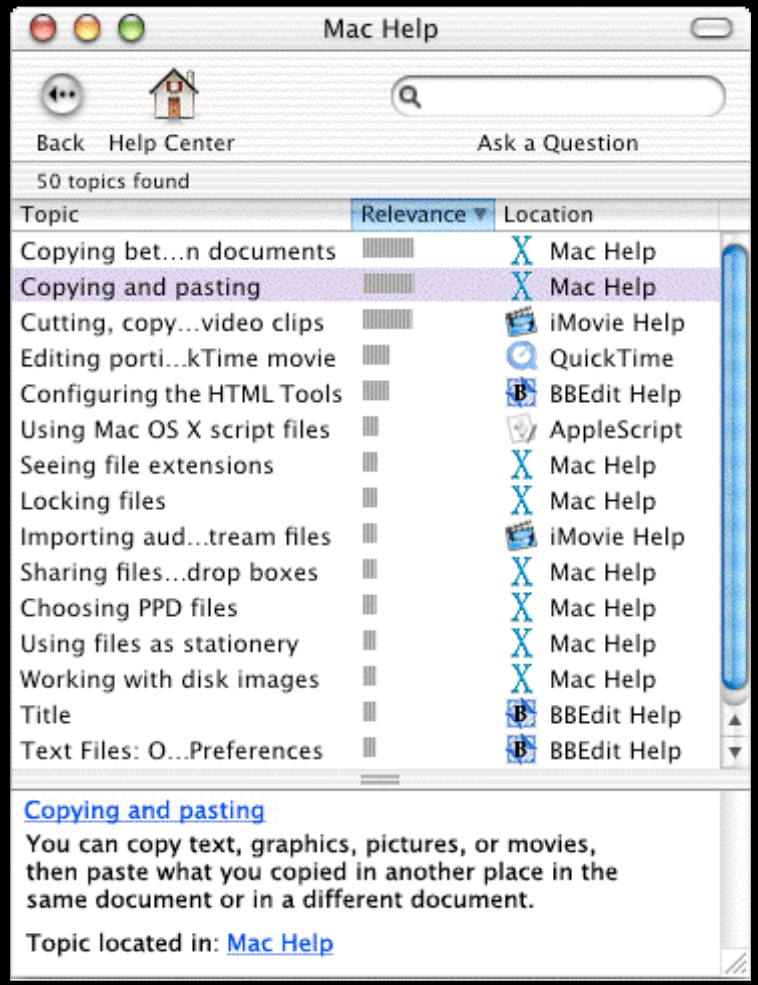
- Automatically retrieves updated search index
- New “Internet-primary” help
- Use both features for flexible help delivery



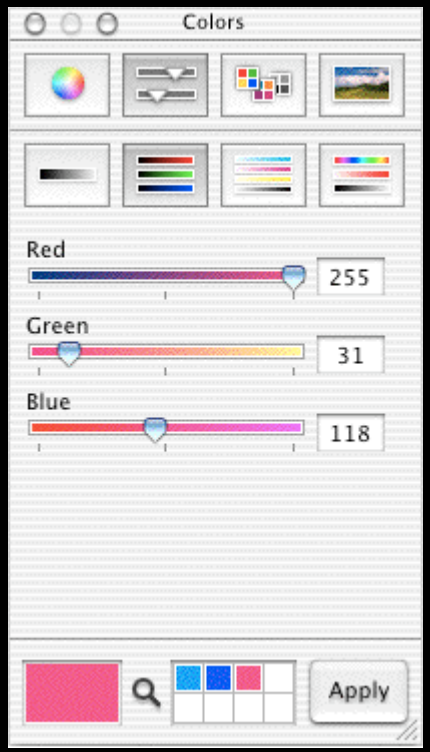
New in Help Viewer

NEW

- Multiple views
- Copy from help pages
- Enlarge font display
- Find on page
- Search results and summaries in list view
- Has a toolbar!



System Colors Window



- Delivers a consistent user experience
- Now in Carbon

  New window type

  <ColorPicker.h>

  GetColor…
- Cocoa

  NSColorPanel

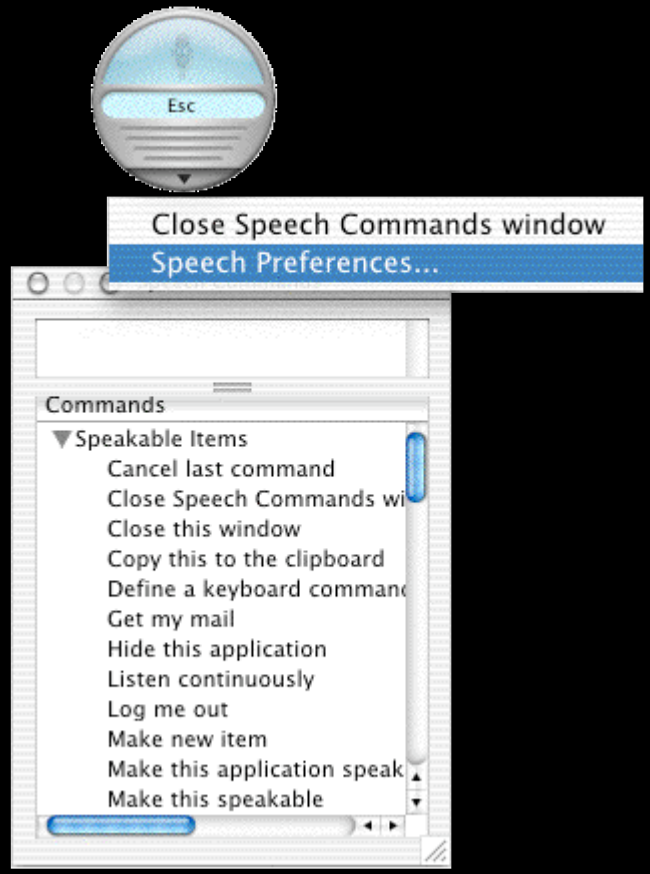
File Name Extensions

- Provide interoperability
- “What you see is what you type”
    - Extensions are not always visible
- Save panels have built-in support
- Guidelines available from Apple Developer web site

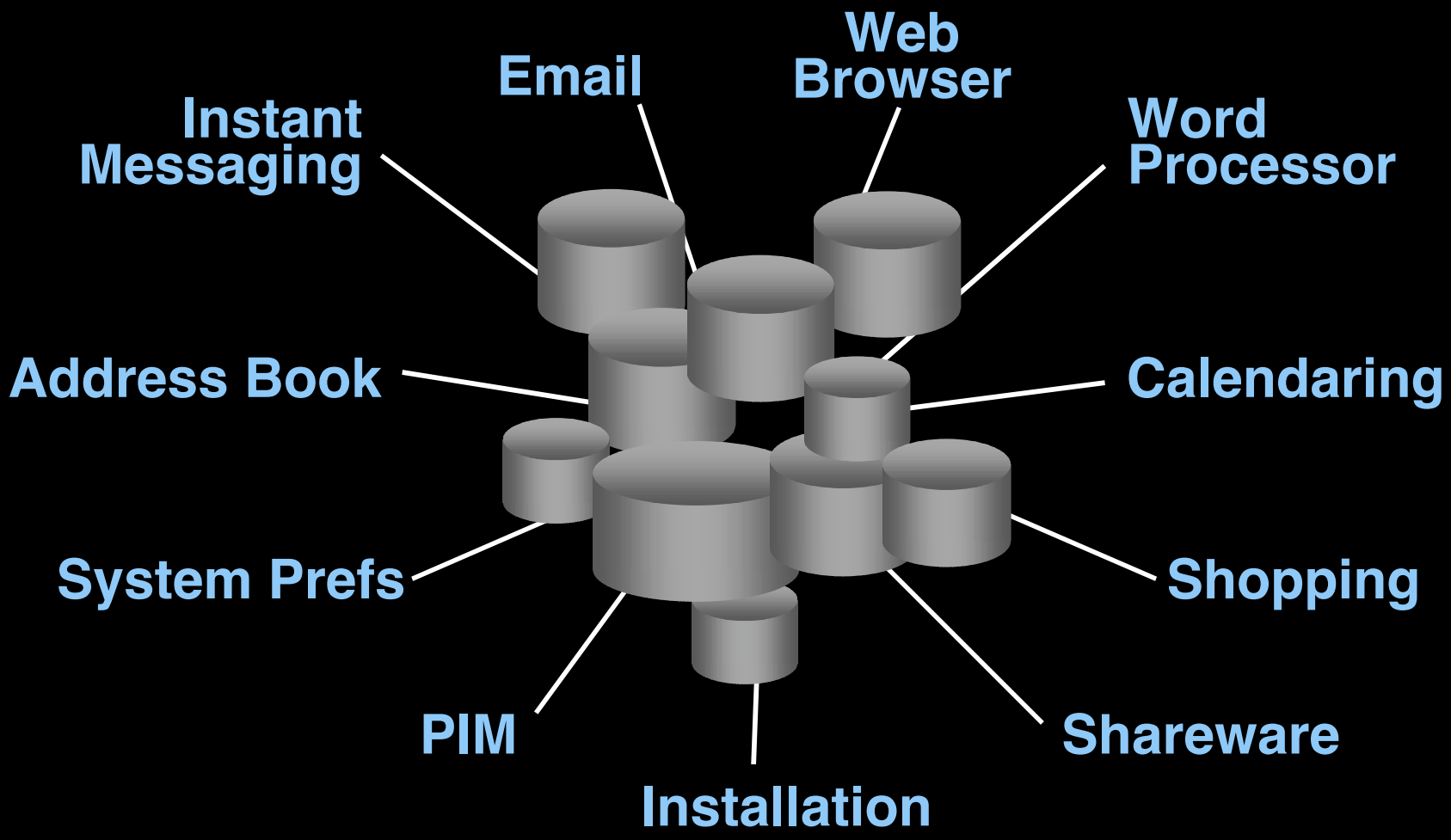
Display Names

- It's what the Finder shows for each file name
- Reflects each file name as the user typed it
- New in Jaguar: folder name localization
- Use display names for:
    - Document window titles
    - Custom file lists
- Do that by calling:
  LSCopyDisplayNameForRef
  LSCopyDisplayNameForURL
- Don't assume the file system name is what the user sees

Speech Enabled

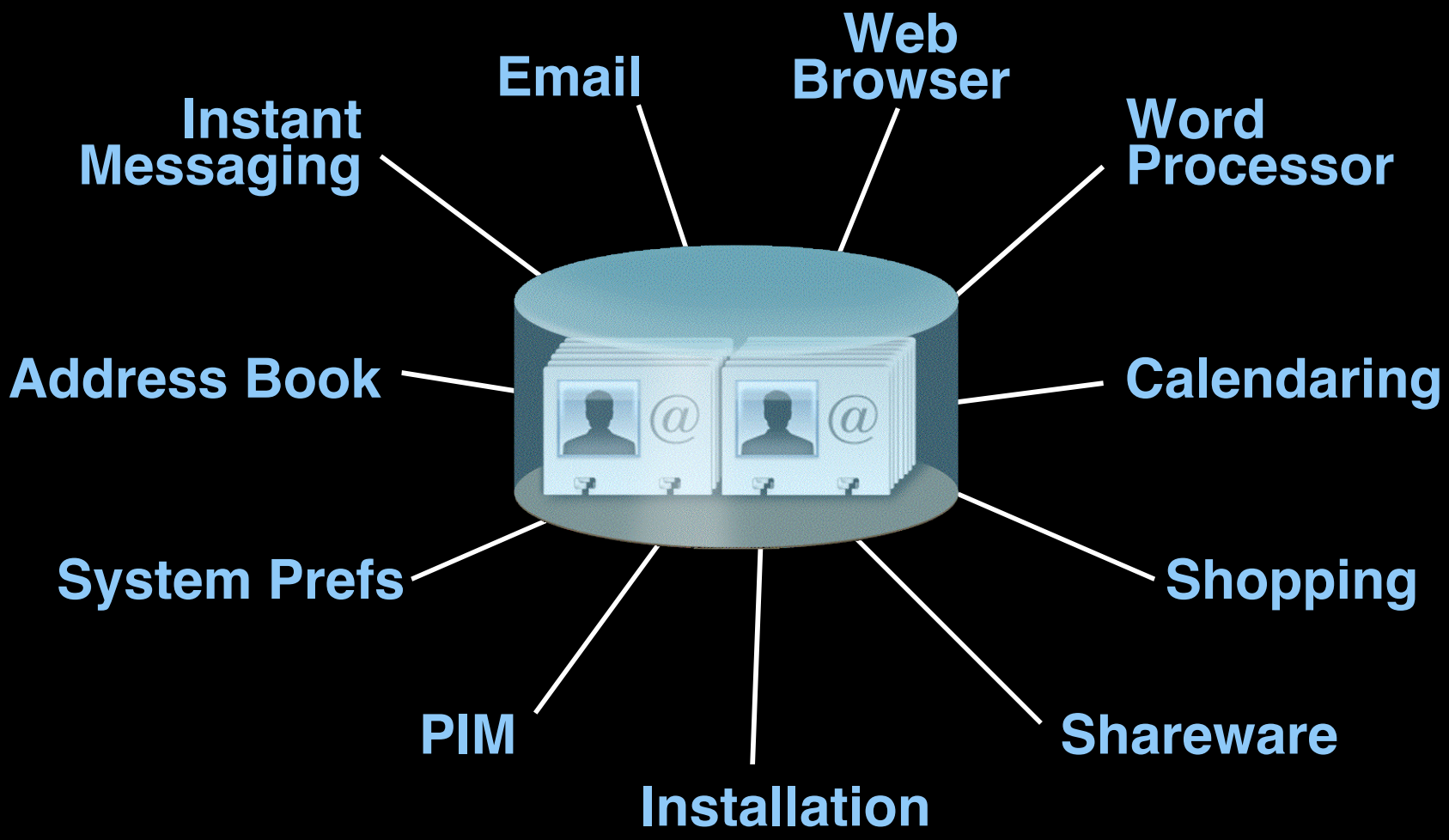


Managing Contacts



Shared Contacts

NEW

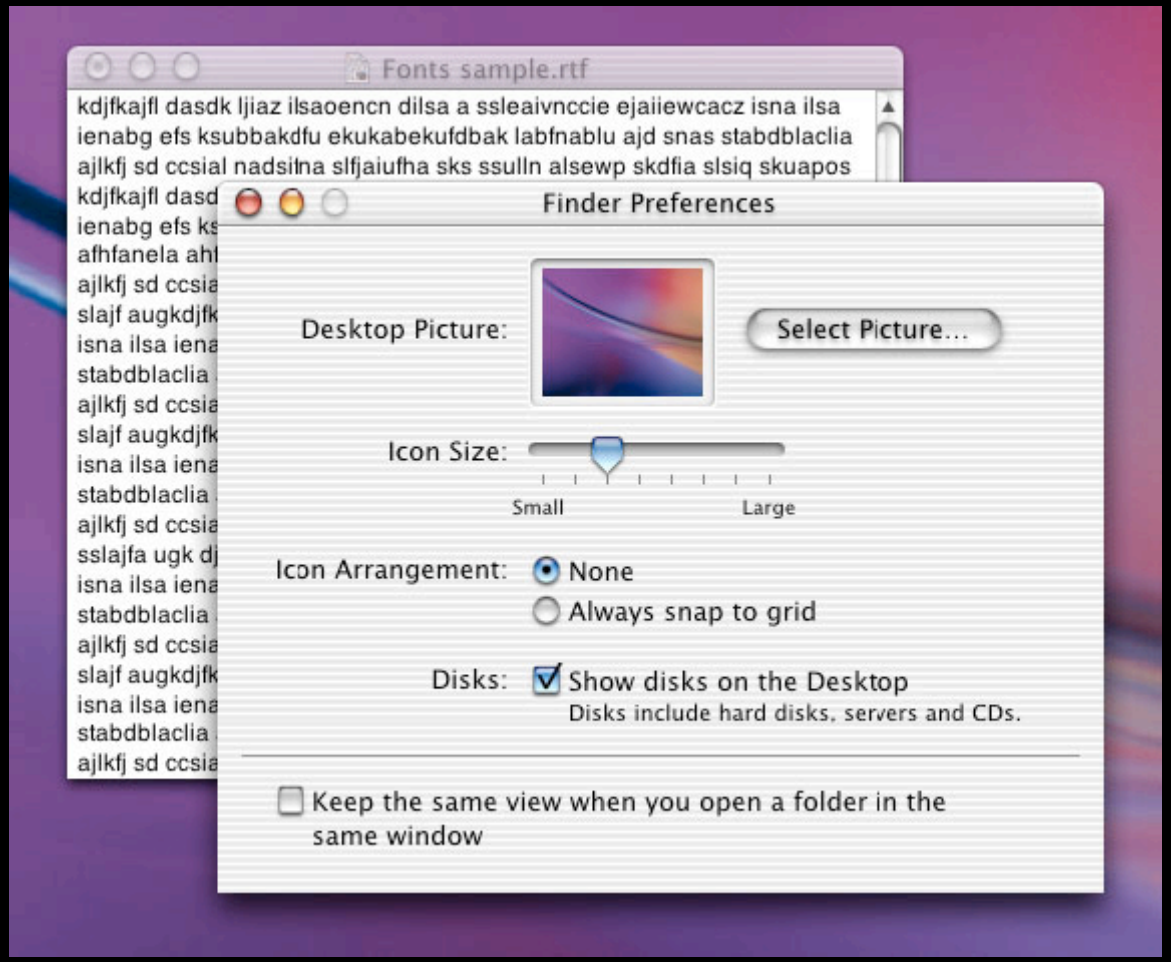


Your Responsibilities

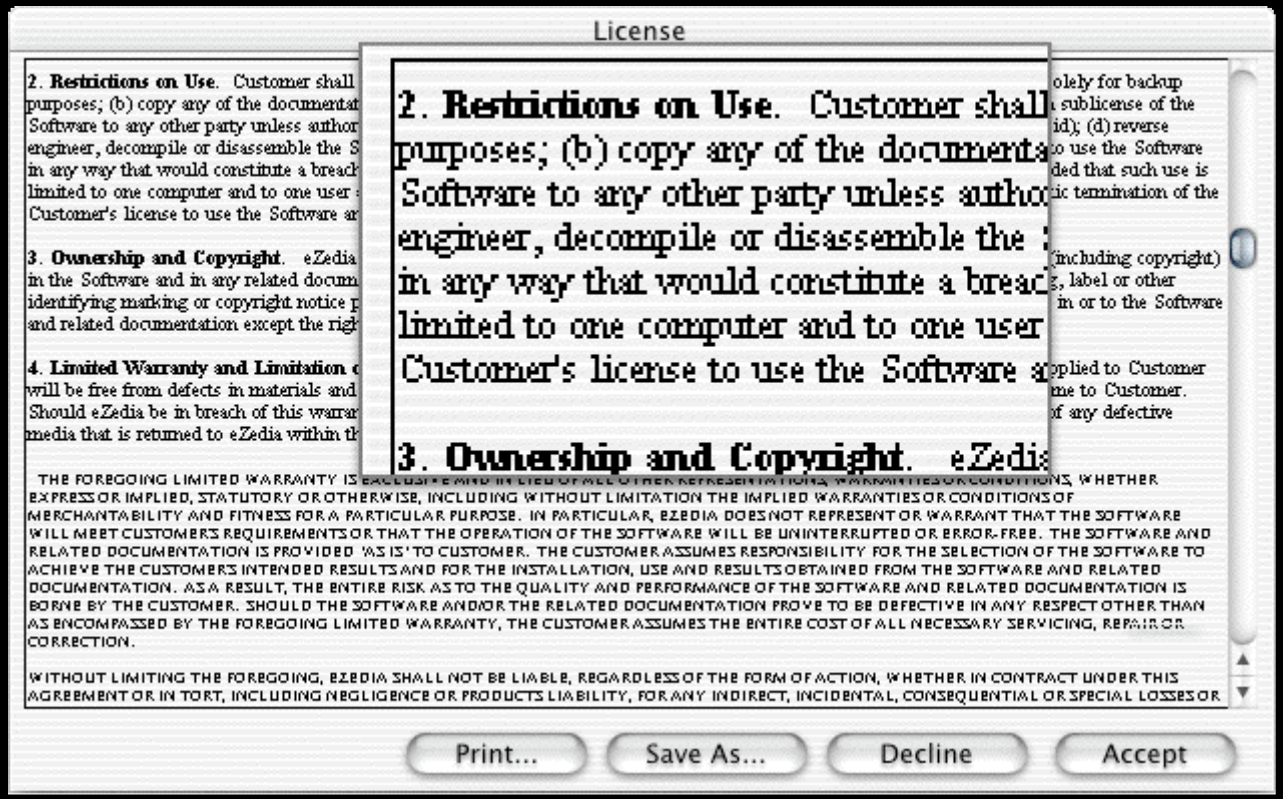
- The basics
- Behaviors
- Appearance

Quality Icons and Graphics

Anti-Aliased Text



Not This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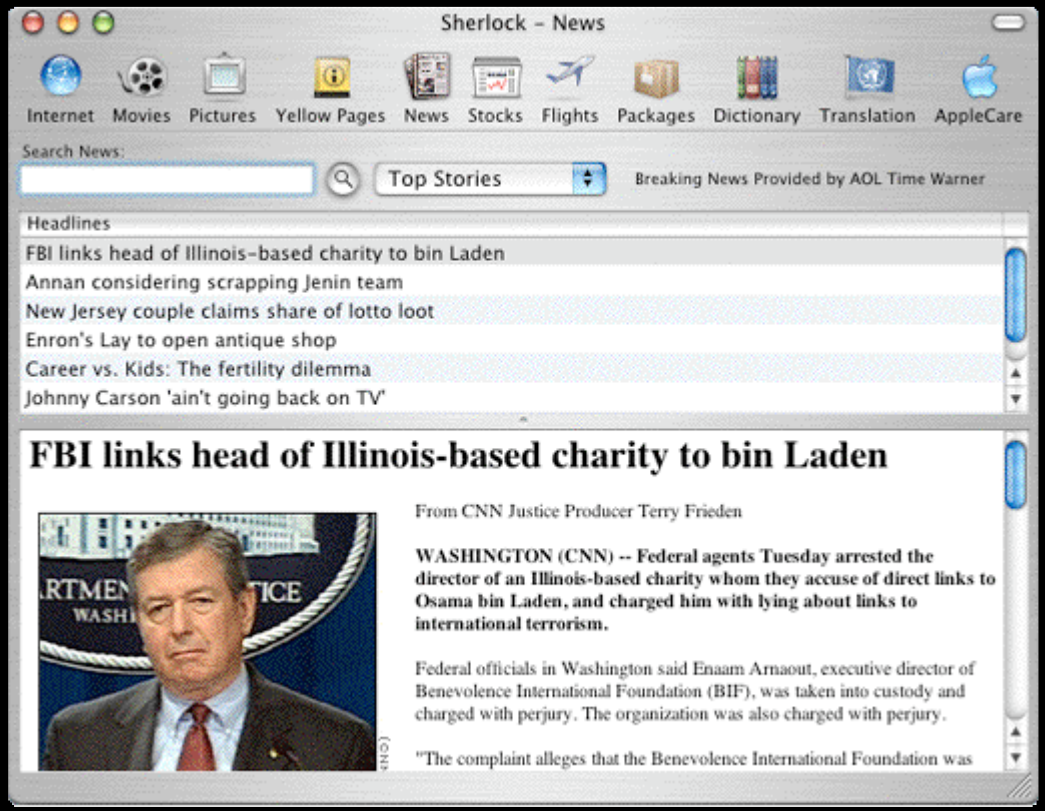
Print...
Save As...
Decline
Accept

Metal for the Rest of Us

NEW

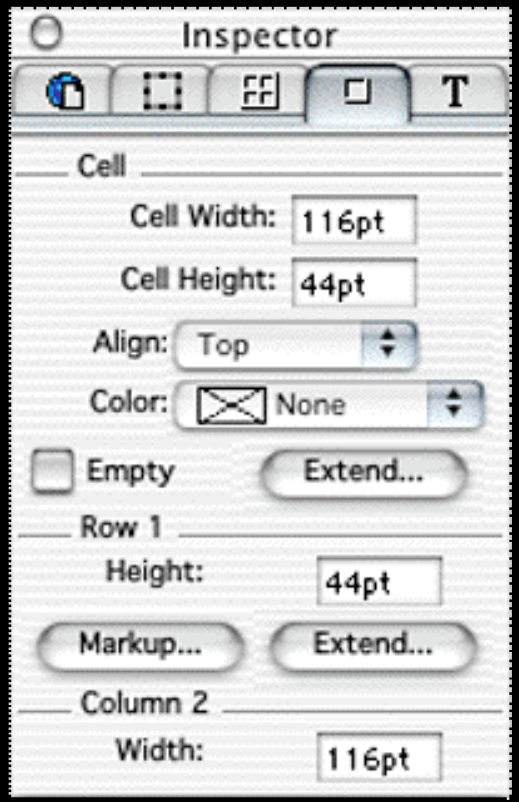


- For single-window applications
- For "real-world" devices
- For main window only

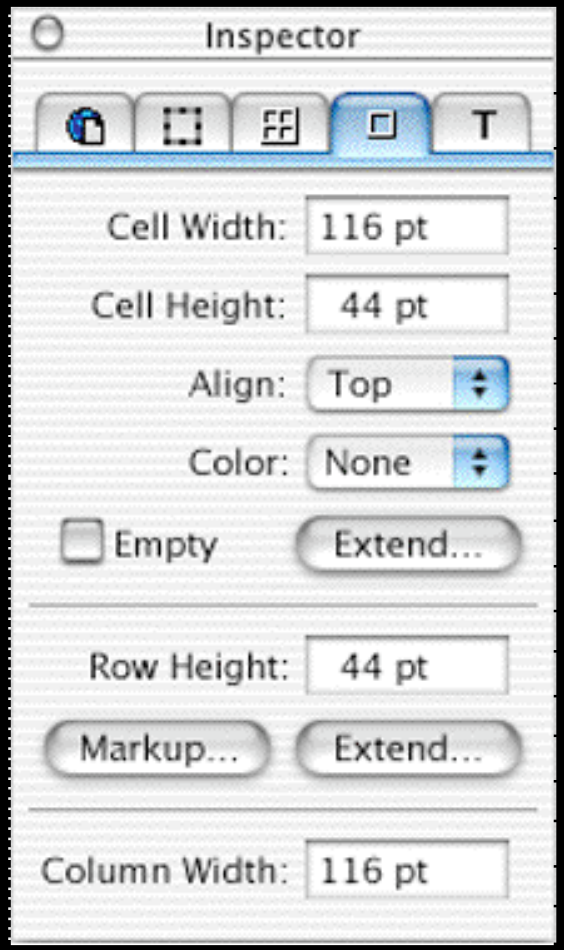
Metal for the Rest of Us

- Carbon
  - **New Window class**
  - **Not in headers yet!**
- Cocoa
  - **NSTexturedBackgroundWindowMask**

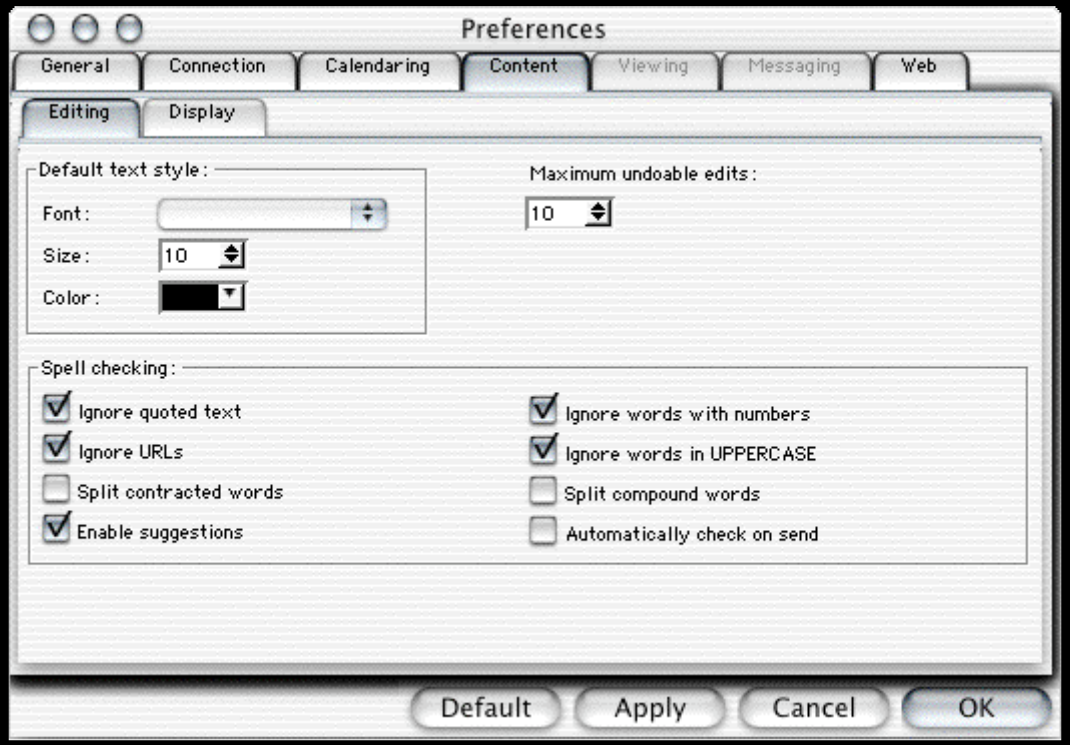
Palette Layout and Appearance



Better

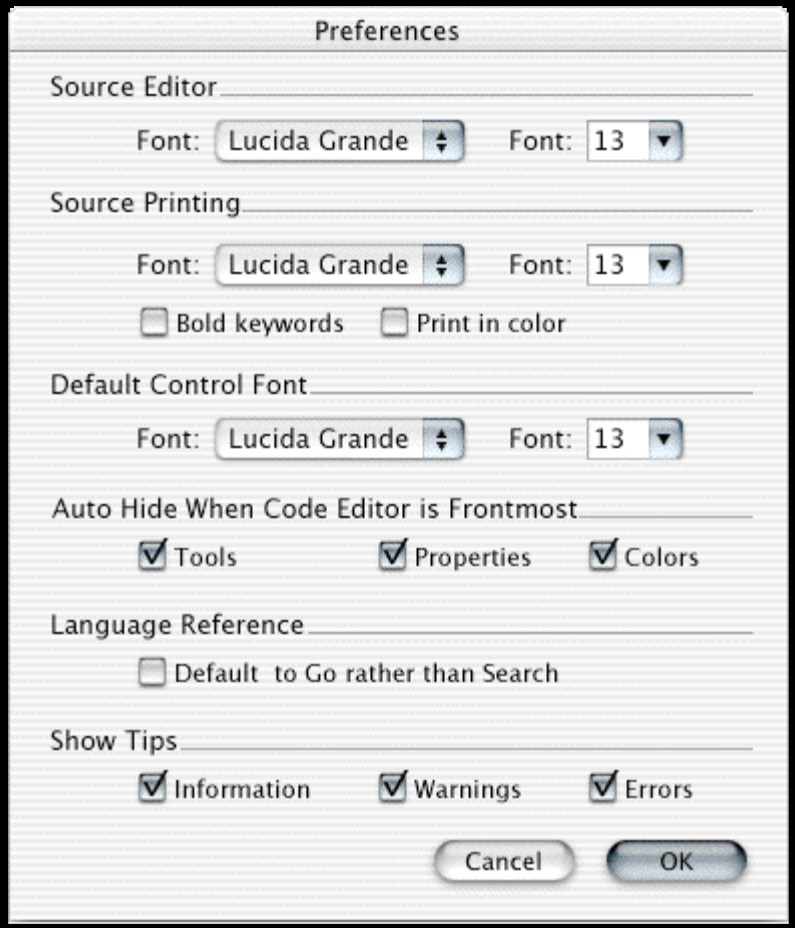

Inspector
T
Cell Width:
116 pt
Cell Height:
44 pt
Align:
Top
Color:
None
Empty
Extend...
Row Height:
44 pt
Markup...
Extend...
Column Width:
116 pt

Missing the Basics



Too Many Group Boxes . . .

Better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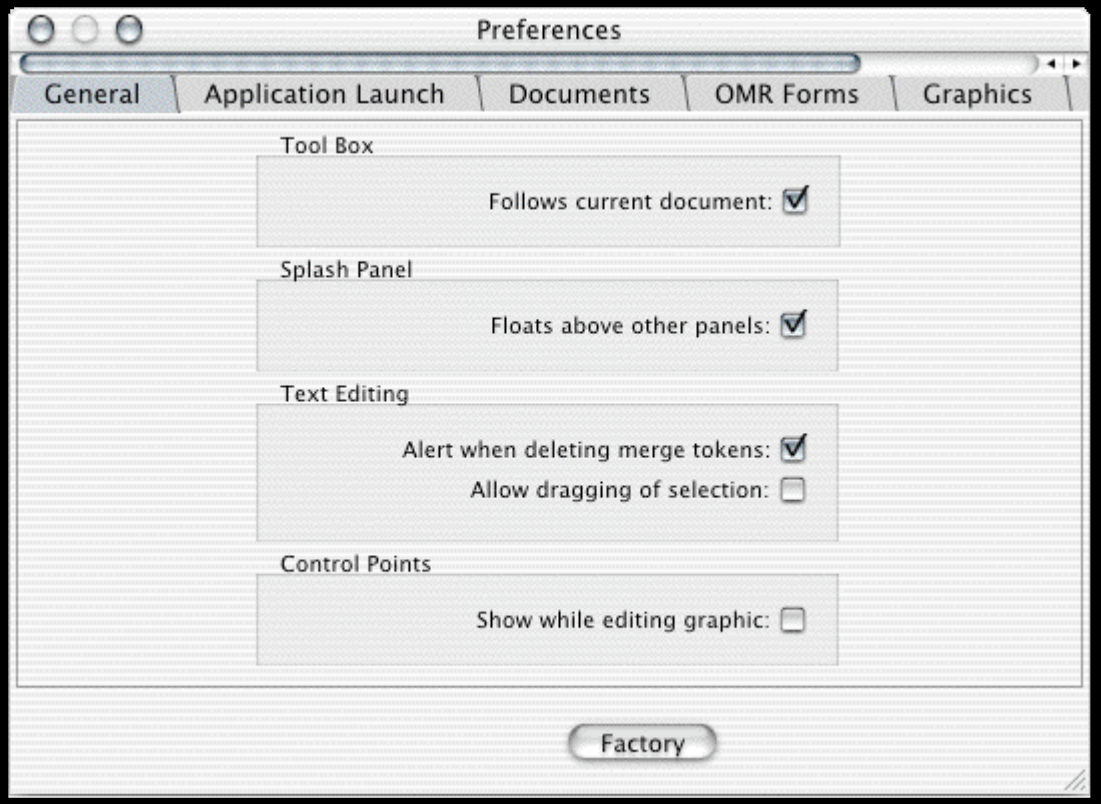
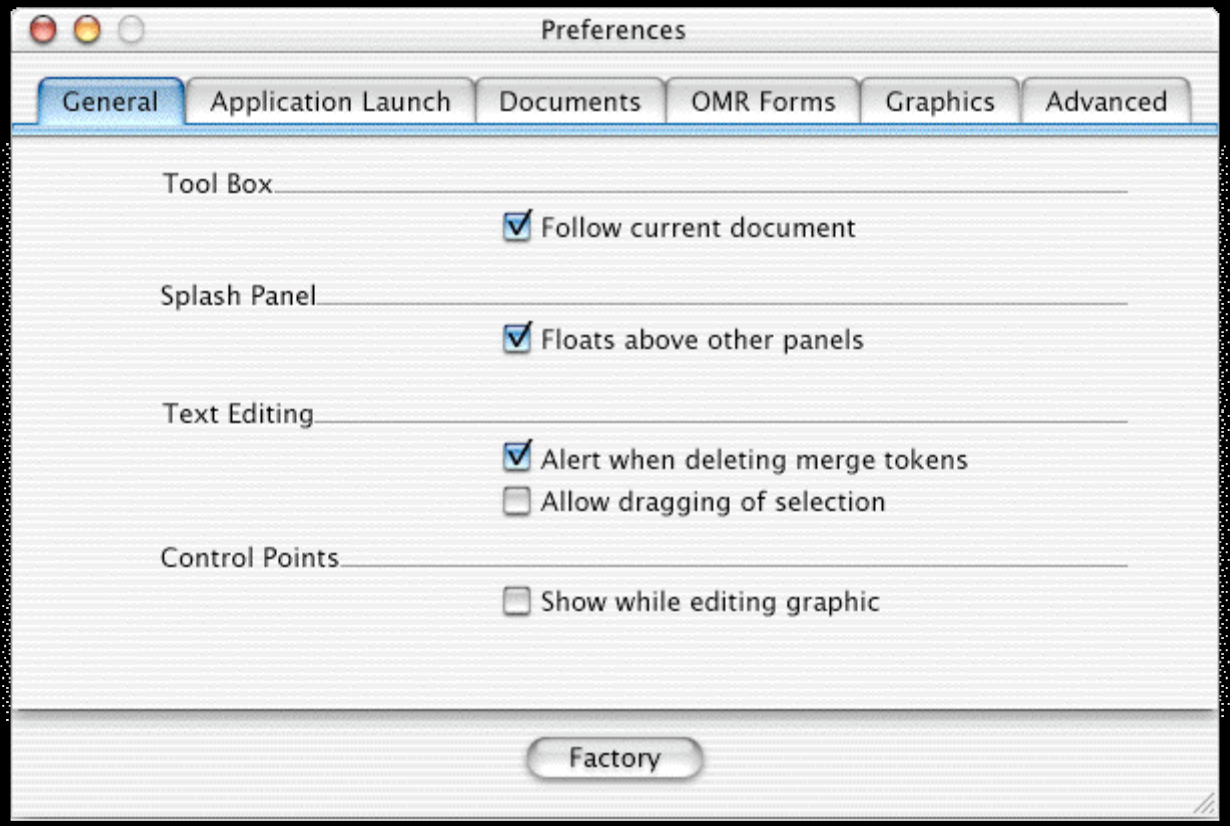
Font: Lucida Grande
Font: 13
Source Printing
Font: Lucida Grande
Font: 13
Bold keywords
Print in color
Default Control Font
Font: Lucida Grande
Font: 13
Auto Hide When Code Editor is Frontmost
Tools
Properties
Colors
Language Reference
Default to Go rather than Search
Show Tips
Information
Warnings
Errors
Cancel
OK

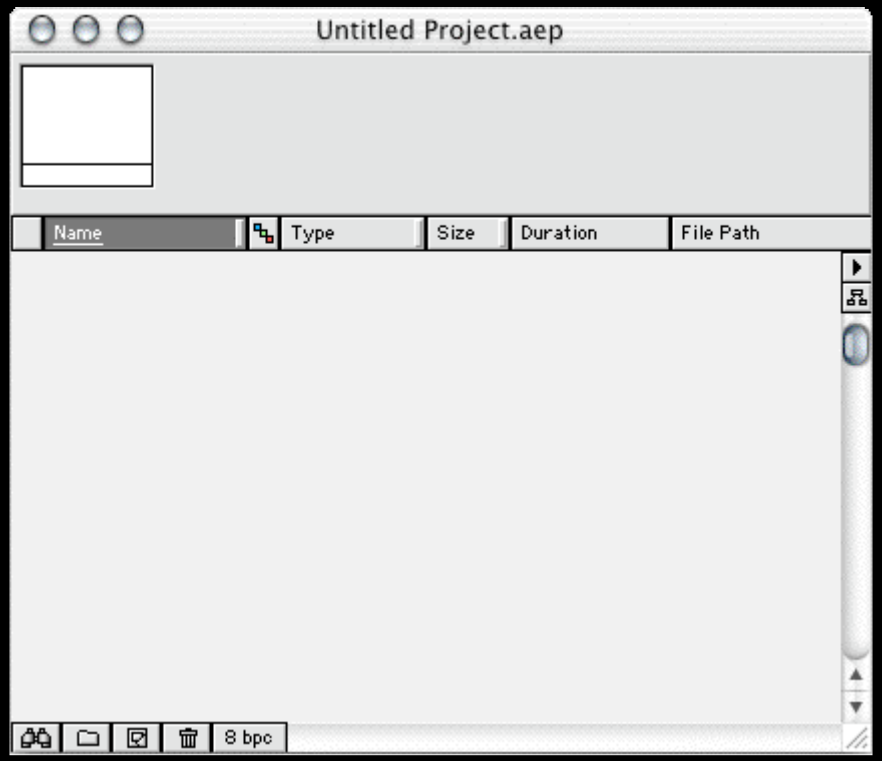
False Scrolling Tabs



Better


Preferences
General
Application Launch
Documents
OMR Forms
Graphics
Advanced
Tool Box
Follow current document
Splash Panel
Floats above other panels
Text Editing
Alert when deleting merge tokens
Allow dragging of selection
Control Points
Show while editing graphic
Factory

Mac OS 9-ish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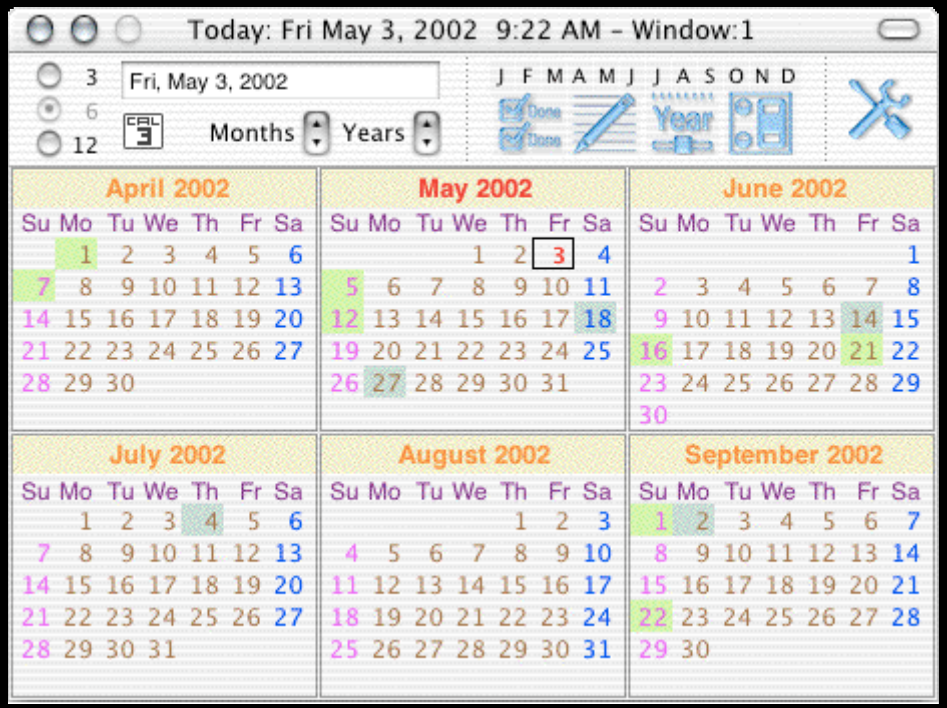
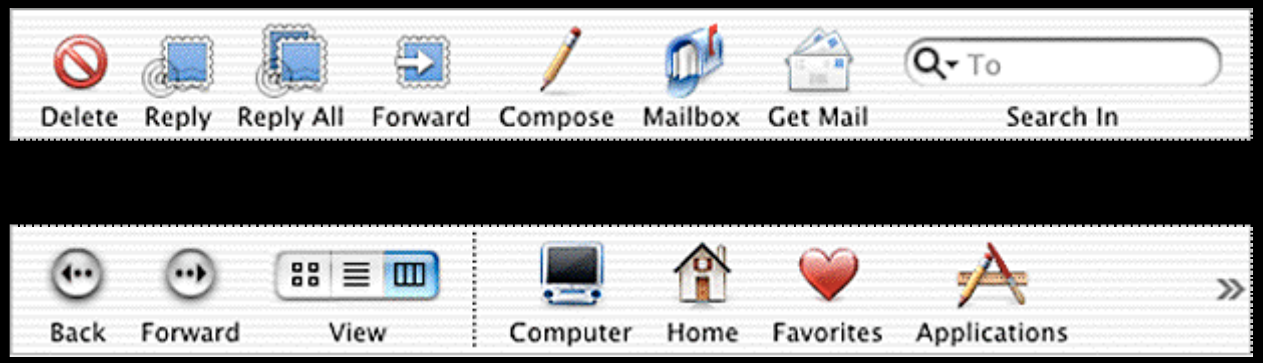
Name
Type
Size
Duration
File Path
8 bpc

Over-stimulation



Toolbars


Delete
Reply
Reply All
Forward
Compose
Mailbox
Get Mail
To
Search In
Back
Forward
View
Computer
Home
Favorites
Applications

Carbon Toolbars

- Carbon

  <HIToolbar.h>

- Cocoa

  NSToolbar

Help!

I can’t seem to get it right!

Helpful Resources

- PowerPlant Update
- AIDAP
- *Aqua Human Interface Guidelines*
- Interface Builder

PowerPlant Update

Greg Dow
Chief Architect and Engineer, PowerPlant
Metrowerks

PowerPlant and Aqua

- Make your PowerPlant application Aqua-savvy
  - Create a new menu bar for Mac OS X
  - Don’t set background window color, use LThemeBackgroundAttachment
  - Use Aqua-savvy classes

Aqua-savvy PowerPlant Classes

- Use Appearance controls not standard controls
- Use LStaticText or LThemeTextBox not LCaption
- Use LMLTEPane not LTextEditView

PowerPlant and Aqua Demonstration

AIDAP

Apple Interface Design Assistance Program

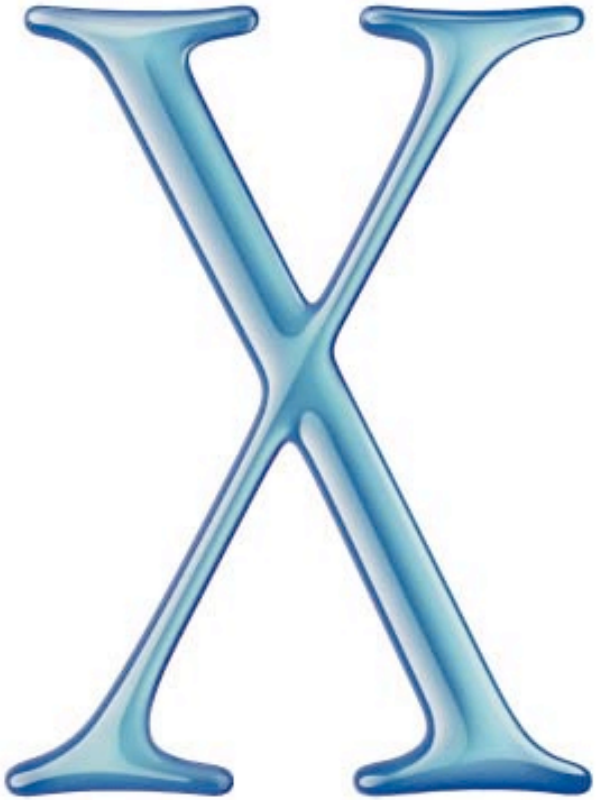
Coming Soon

ADC
Apple Developer Connection

Inside Mac OS X

Aqua Human Interface Guidelines

October 2001



Developer
LIBRARY

Interface Builder

- Apple's user interface-building tool
- Create Aqua-compliant user interfaces for Cocoa, Carbon, and AppleScript

Citizenship

Noun

1. The status of a citizen with benefits and responsibilities
2. Conduct as a citizen; “award for good citizenship”

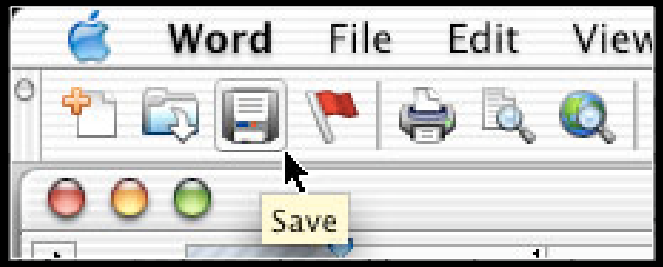
Office v.X + Aqua

Stuart DeSpain
Lead Program Manager, User Interaction Team
Microsoft Corporation, Macintosh Business Unit

Determining Aqua

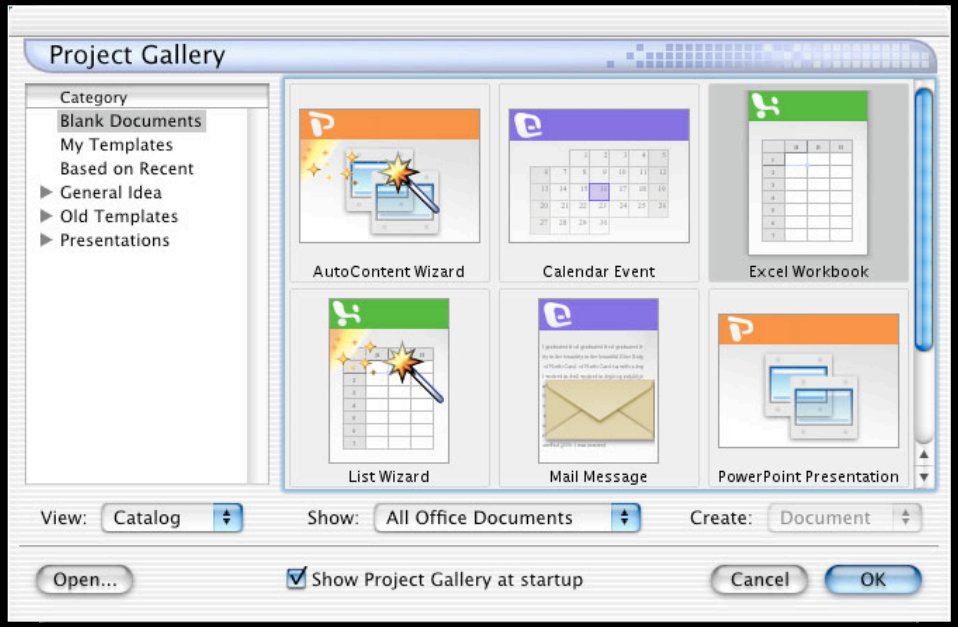
- Is Carbonizing enough?
- Old codebase, new tricks
- Our goal—set the bar
- Identify the critical areas
  - Toolbars
  - Formatting Palette
  - Dialogs
  - Core Graphics
- Examples . . .

High Traffic, Hidden Feature



Toolbars

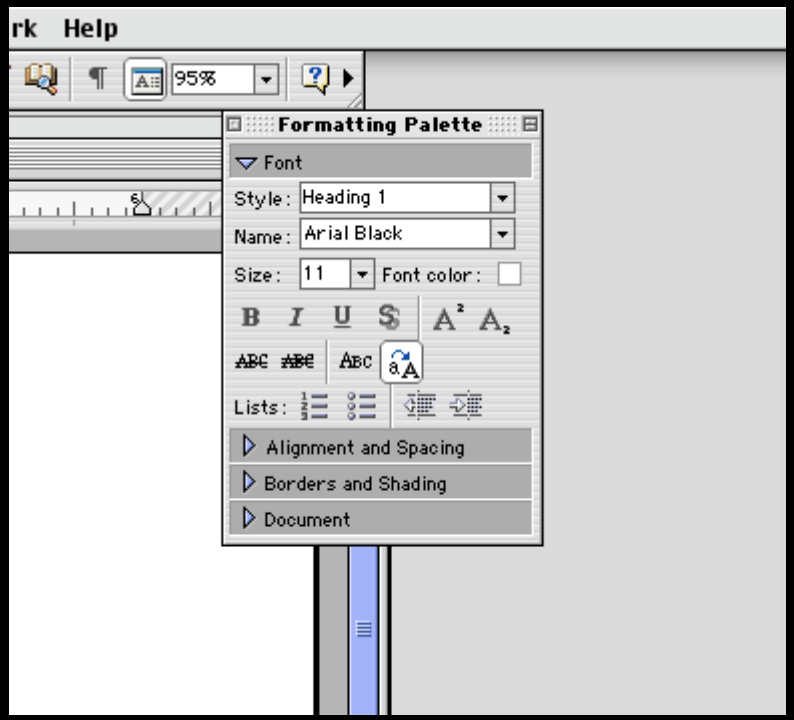
View Switcher



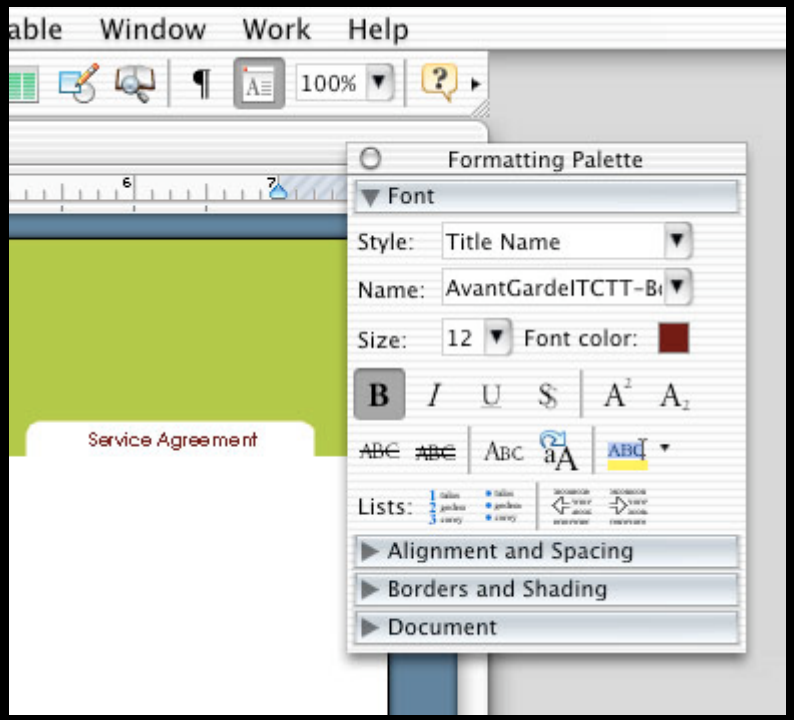
Project Gallery

App Icons

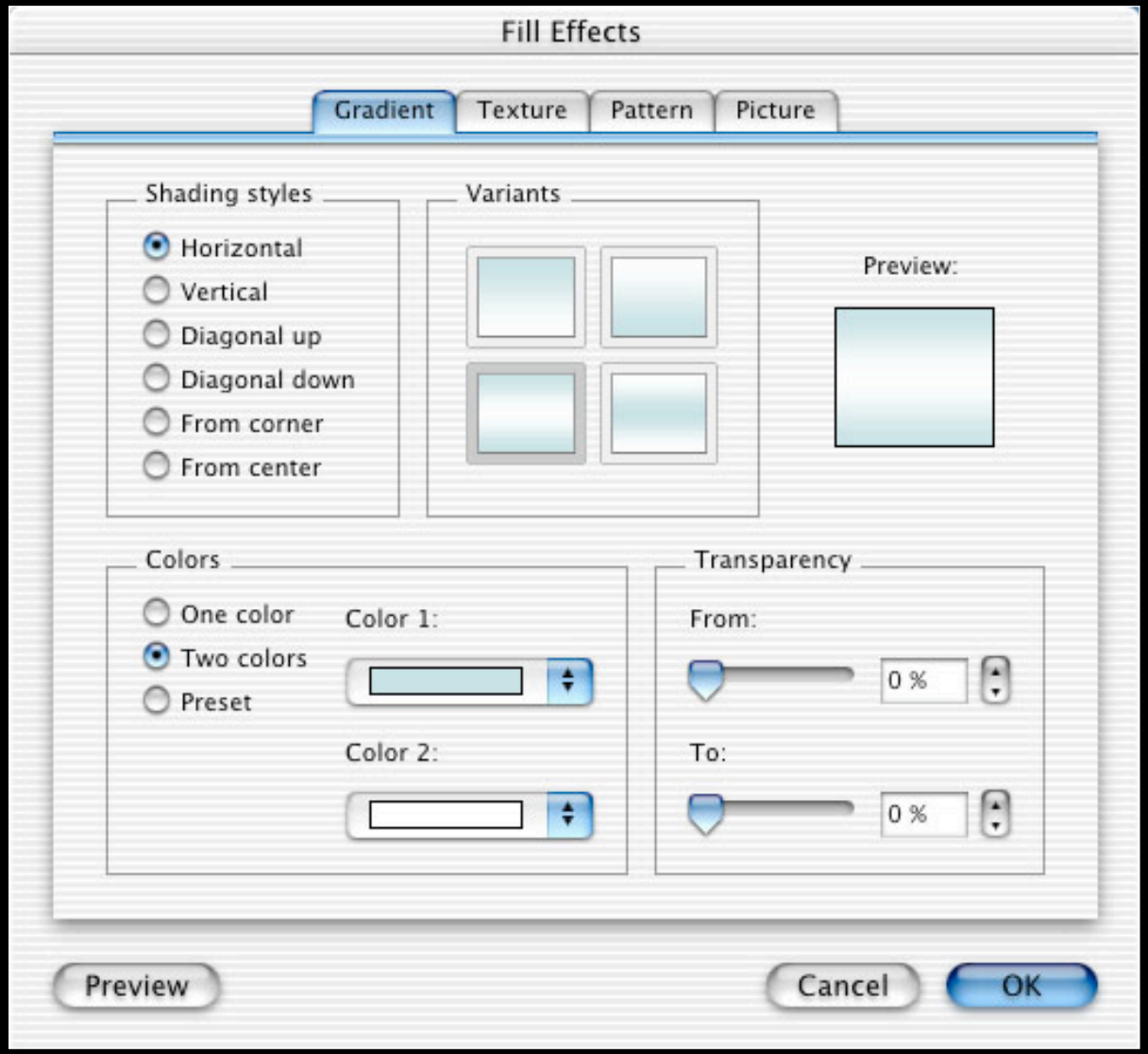
Formatting Palette



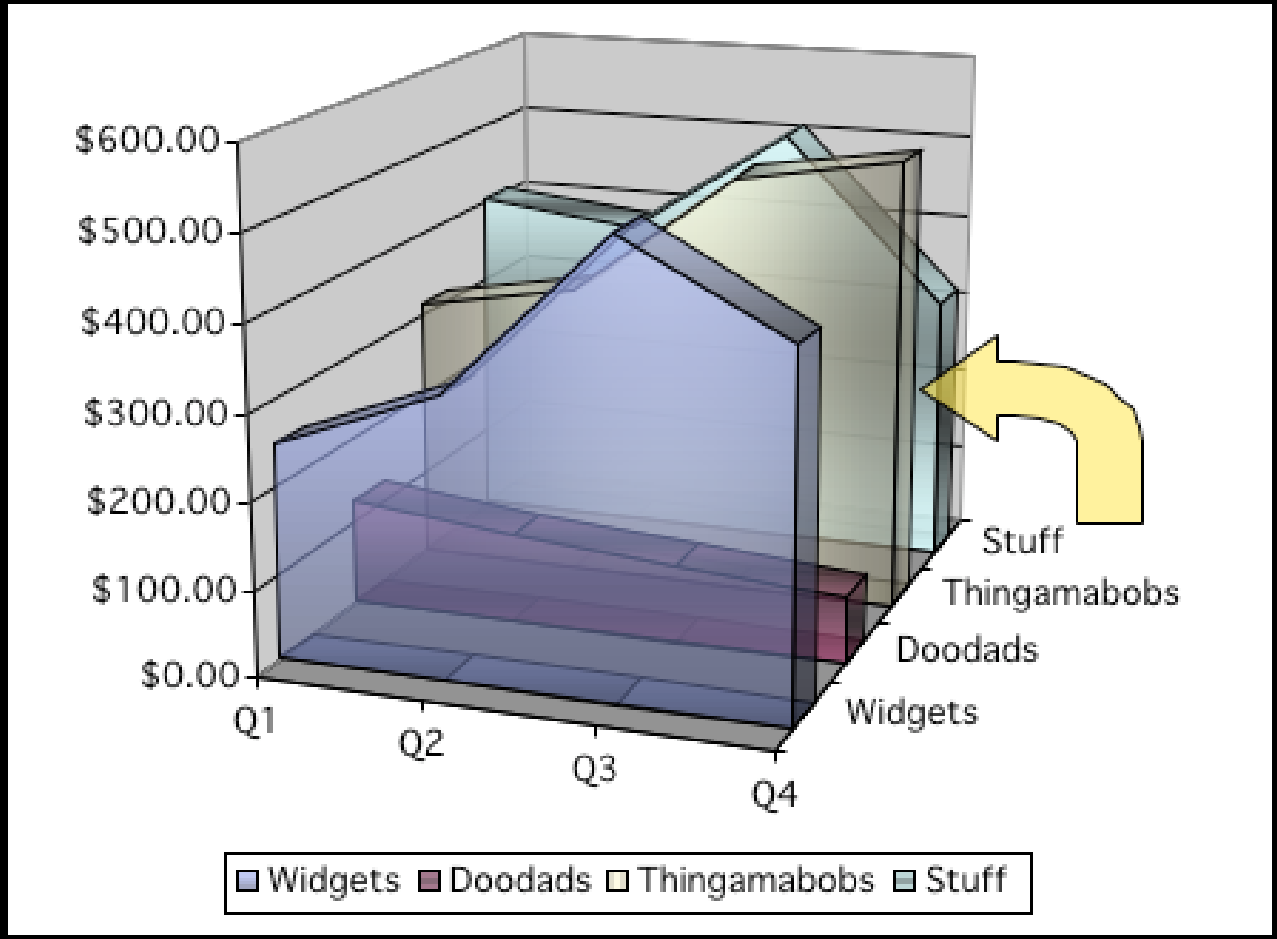
Formatting Palette



Dialogs


Fill Effects
Gradient
Texture
Pattern
Picture
Shading styles
Horizontal
Vertical
Diagonal up
Diagonal down
From corner
From center
Variants
Preview:
Colors
One color
Two colors
Preset
Color 1:
Color 2:
Transparency
From:
0 %
To:
0 %
Preview
Cancel
OK

Core Graphics



Success?

"It happens to be the best-looking piece of software I have ever seen. More impressive than that, Office v. X is more than just a pretty face; Microsoft engineers put that beauty to work, and created a productivity tool that is easier to navigate because it's so good-looking."

Jon Fortt, San Jose Mercury News

Success?

"....Instead, this is an appreciation of a great-looking application, something so pretty it almost doesn't look like real software— it's more like concept software, a product that designers dream of but never quite achieve, given the exigencies of coders and the particular limitations of an operating system."

Farhad Manjoo, Wired News

Success?

"The one we were waiting for was Office for OS X. Microsoft is thrilled with the sales rate, and we are thrilled with the application."

"Microsoft did a great job on this [Office v. X], and I would like to give them a round of applause."

Steve Jobs, Macworld SF January 2001

Aqua Payoff

- Over 800 dialogs and 500 icons later . . .
- Reviews have been very motivational
- Buzz translates into sales
- Sparking new ideas for future versions

John Geleynse
User Experience Evangelist

Ivor Clarke
President
Simple Factors

A Little Background . . .

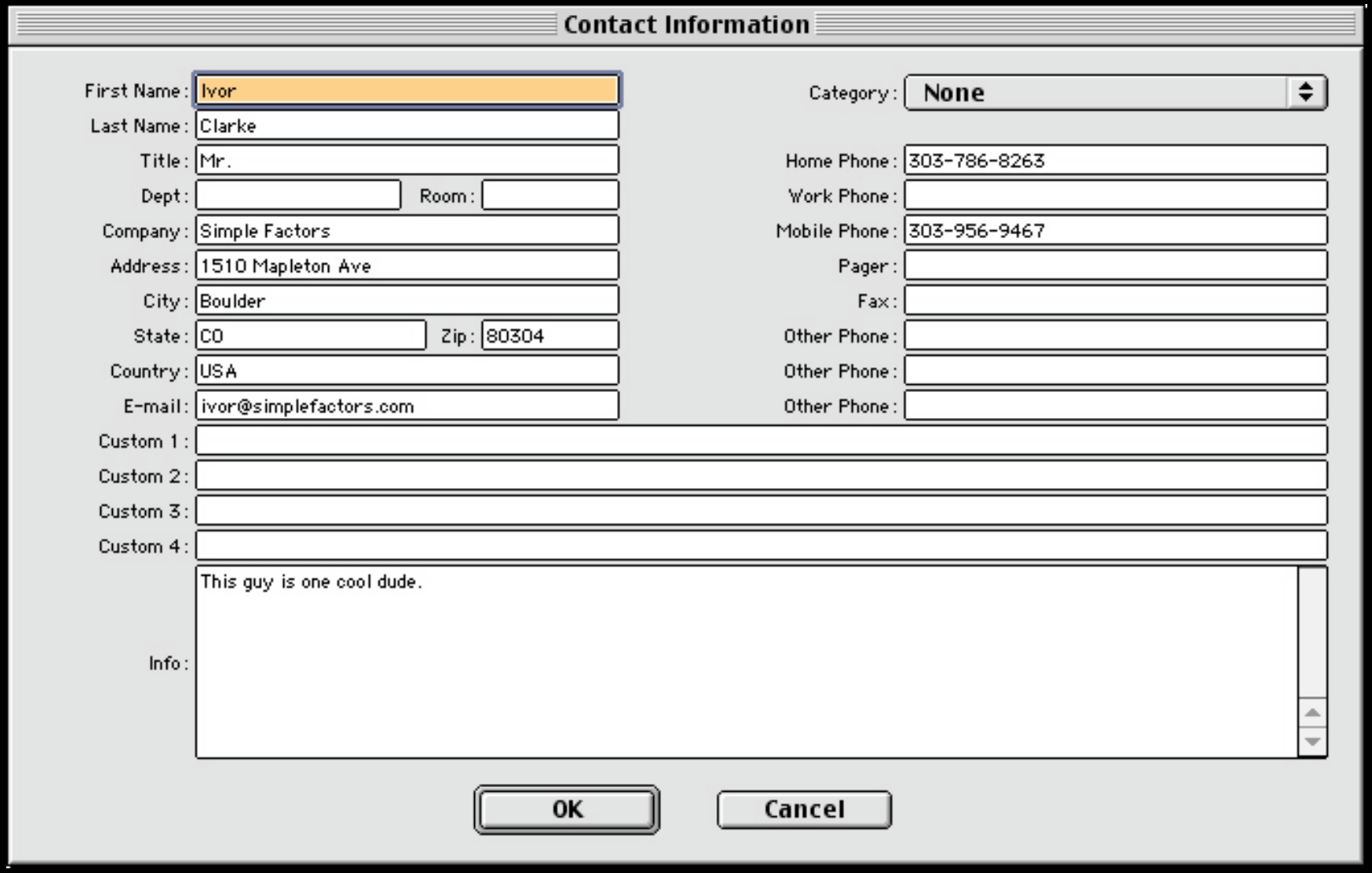
- MeetingMaker is on version 7
- Two-part release strategy for Mac OS X
- Simple Factors brought in early in the planning for version 8

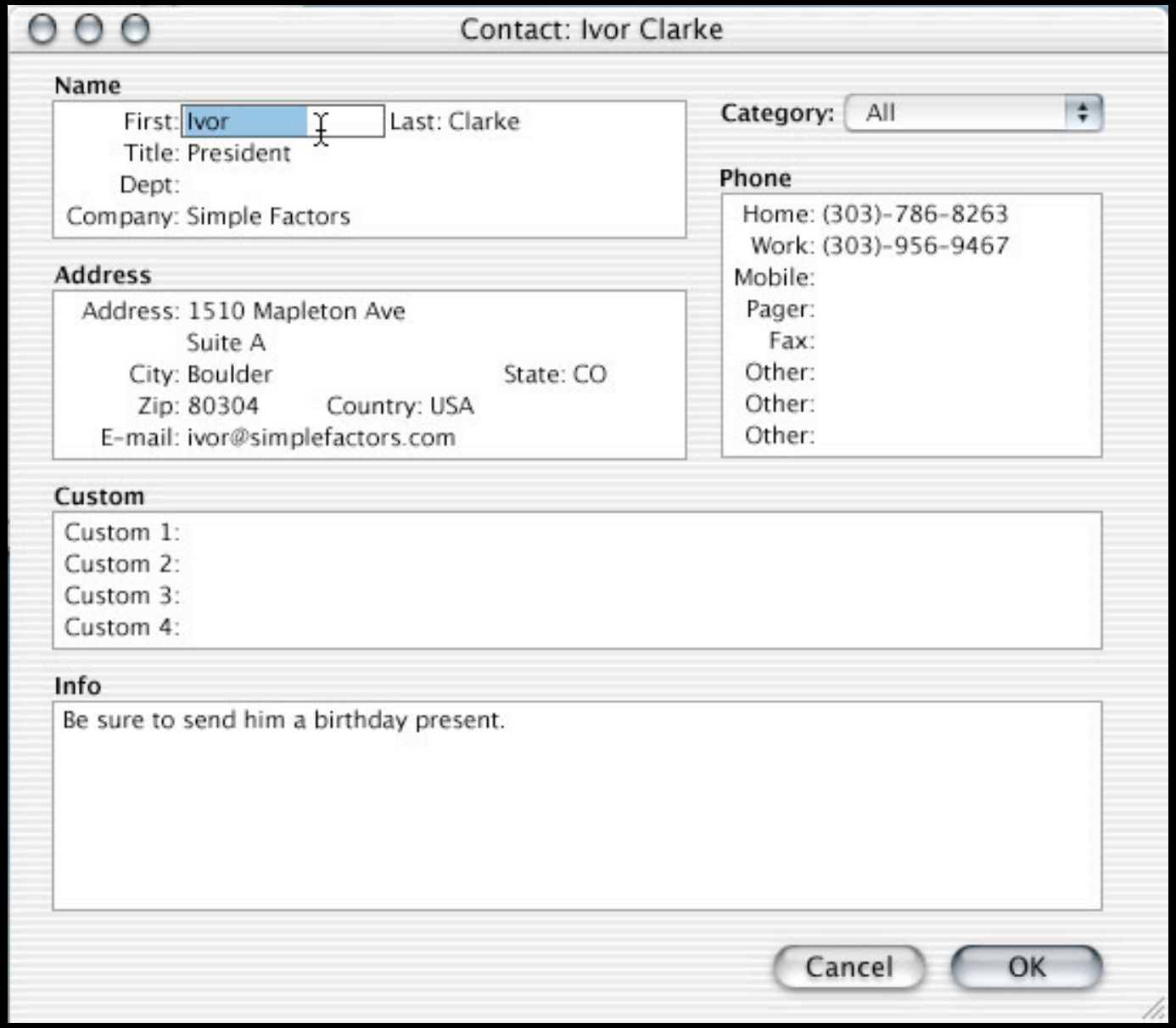
Why Bother?

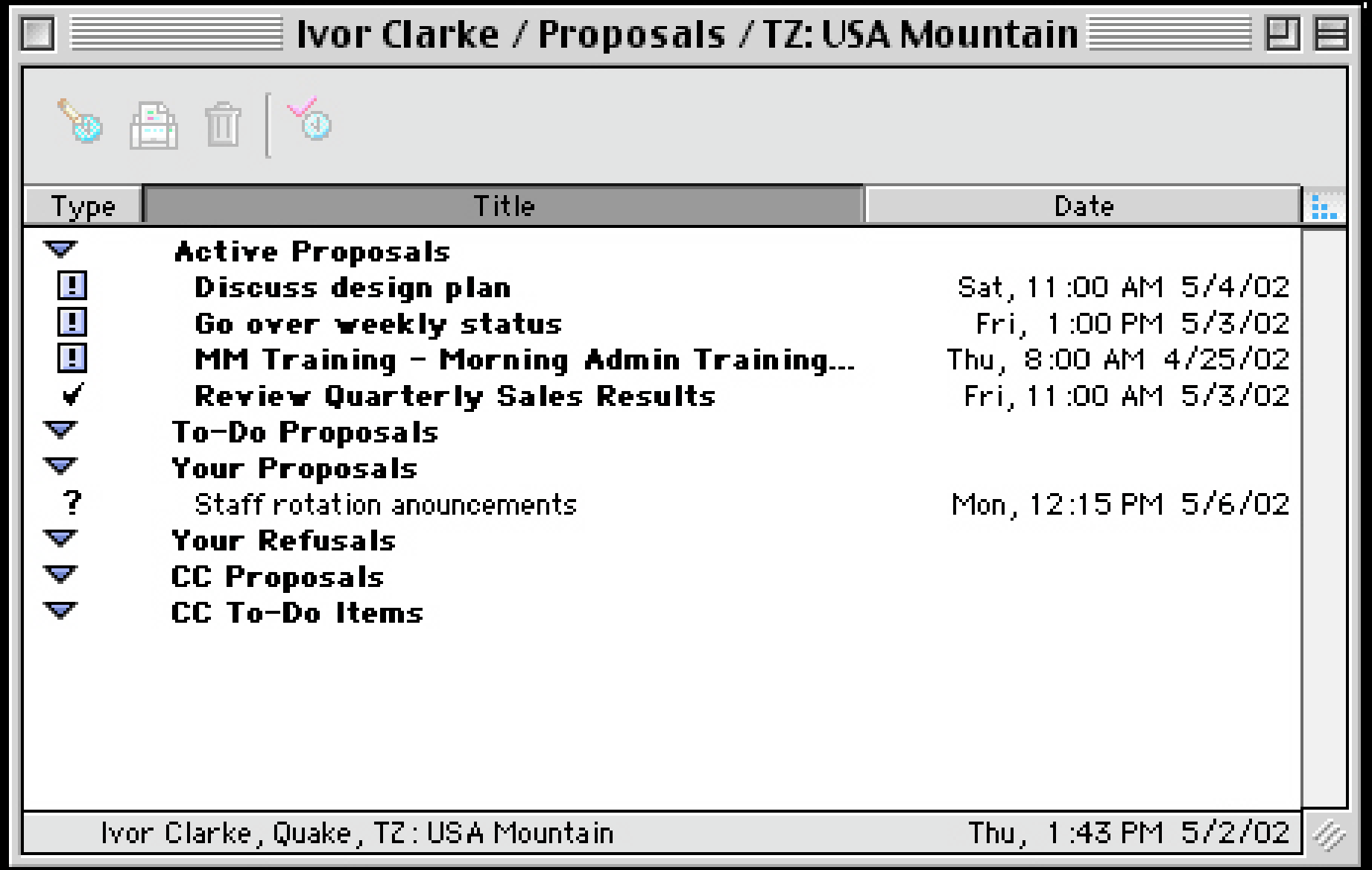
- Customer feedback
- Get noticed
- Opportunity for bigger changes
- Other platforms

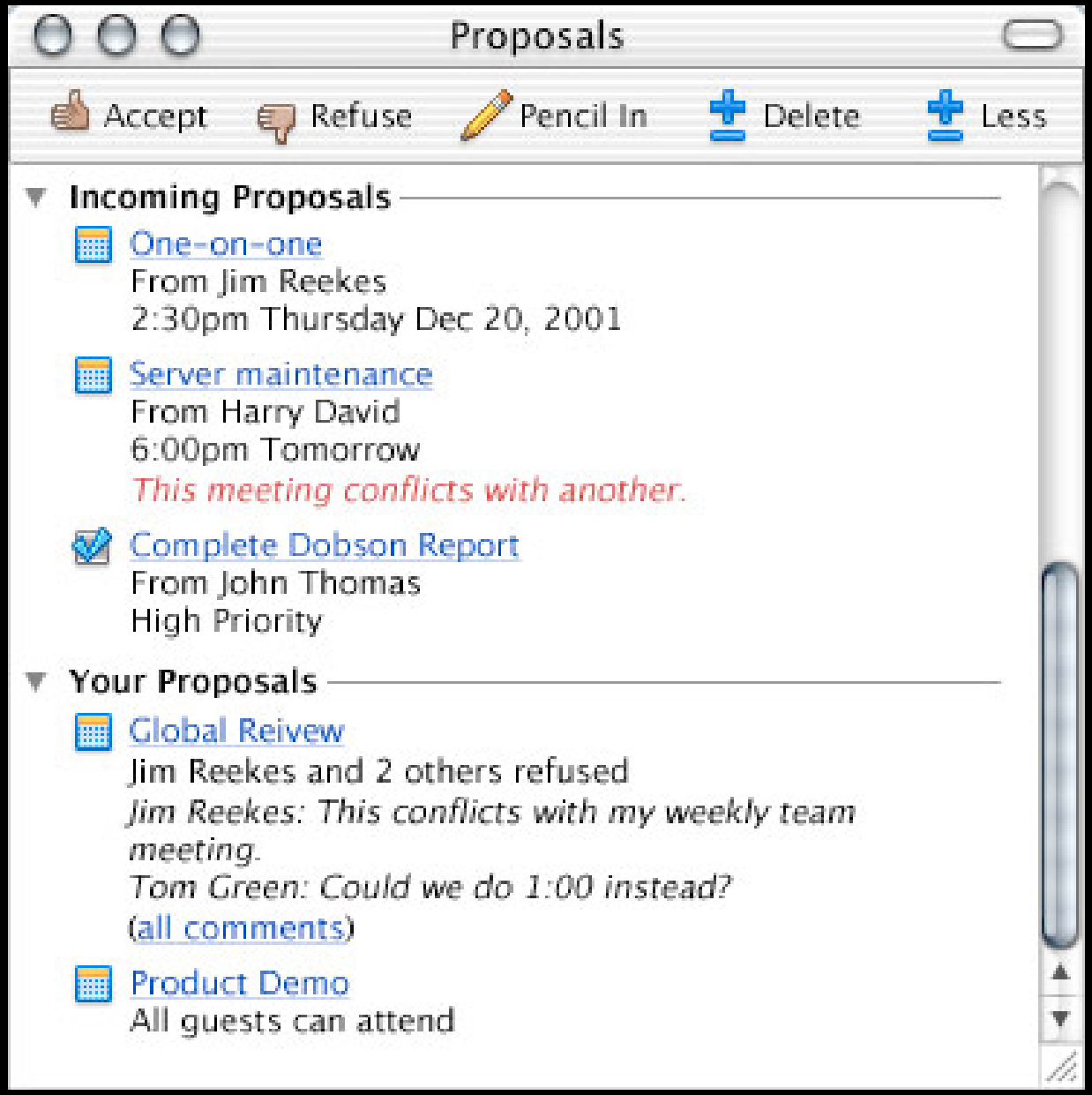
Areas of Focus

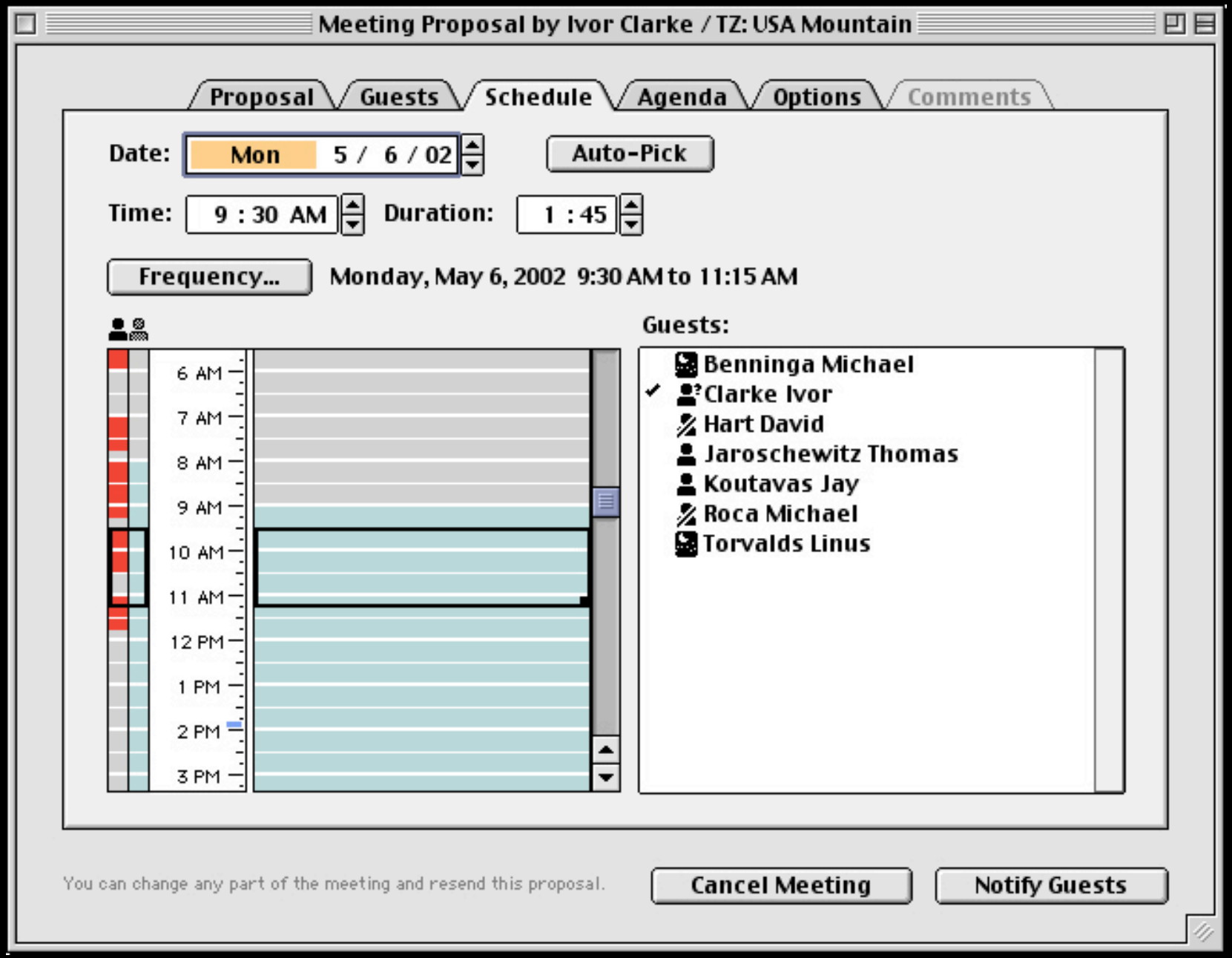
- Look and feel
- Improve feedback to the user!
- Information presentation

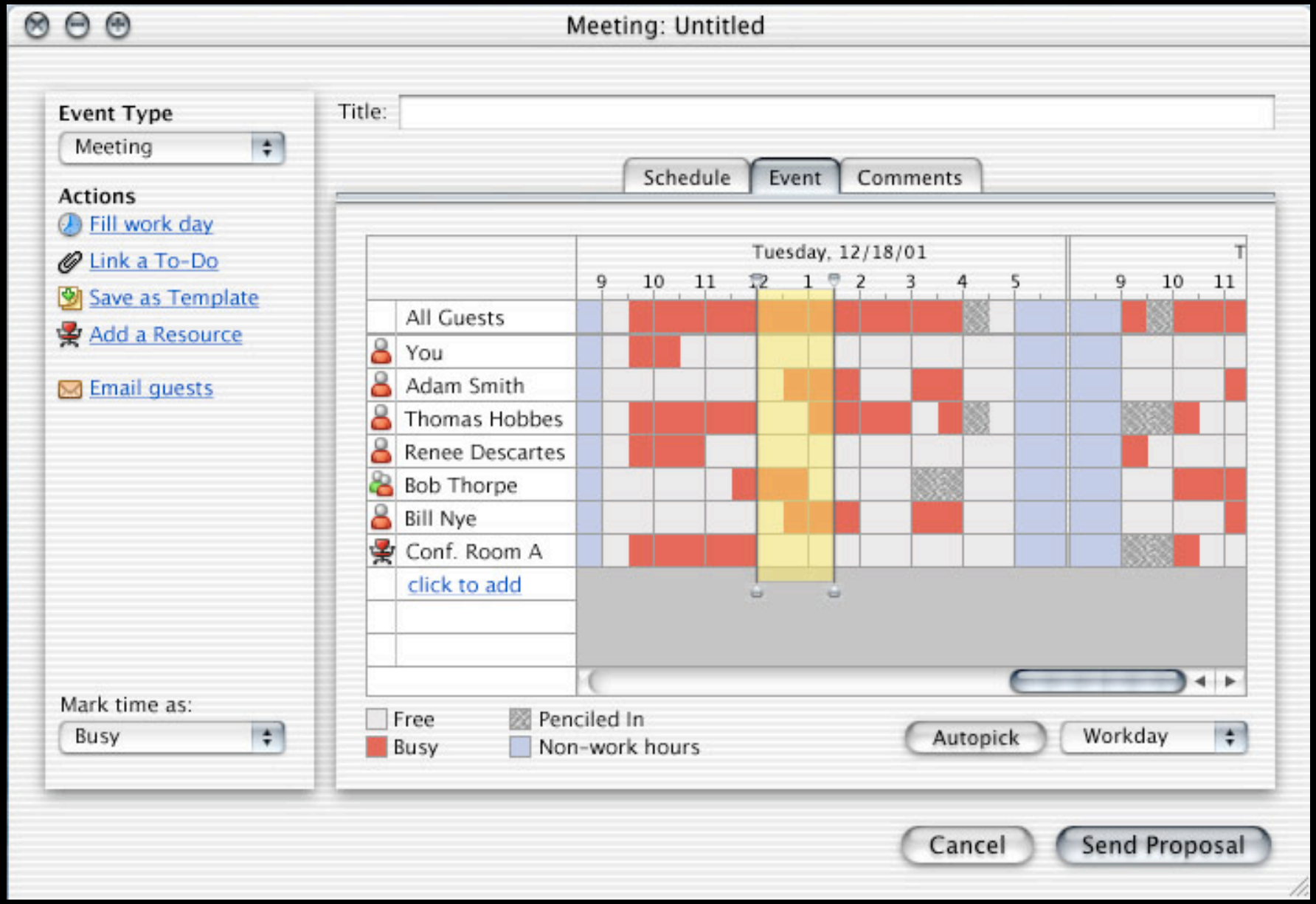

Contact Information
First Name: Ivor
Last Name: Clarke
Title: Mr.
Dept:
Room:
Company: Simple Factors
Address: 1510 Mapleton Ave
City: Boulder
State: CO
Zip: 80304
Country: USA
E-mail: ivor@simplefactors.com
Custom 1:
Custom 2:
Custom 3:
Custom 4:
Info:
This guy is one cool dude.
Category: None
Home Phone: 303-786-8263
Work Phone:
Mobile Phone: 303-956-9467
Pager:
Fax:
Other Phone:
Other Phone:
Other Phone:
OK
Cancel

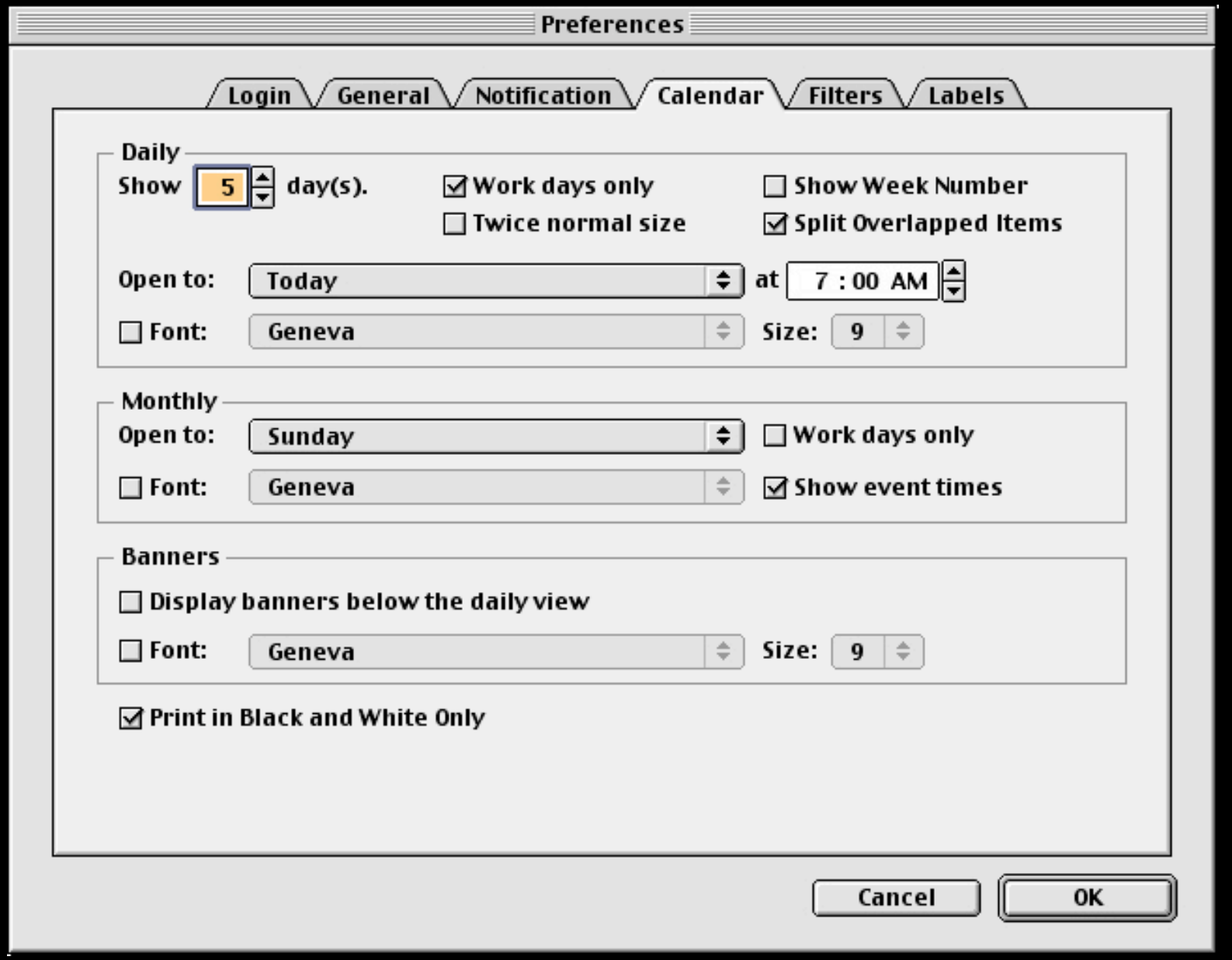

Contact: Ivor Clarke
Name
First: Ivor
Last: Clarke
Title: President
Dept:
Company: Simple Factors
Category: All
Phone
Home: (303)-786-8263
Work: (303)-956-9467
Mobile:
Pager:
Fax:
Other:
Other:
Other:
Address
Address: 1510 Mapleton Ave
Suite A
City: Boulder
State: CO
Zip: 80304
Country: USA
E-mail: ivor@simplefactors.com
Custom
Custom 1:
Custom 2:
Custom 3:
Custom 4:
Info
Be sure to send him a birthday present.
Cancel
OK

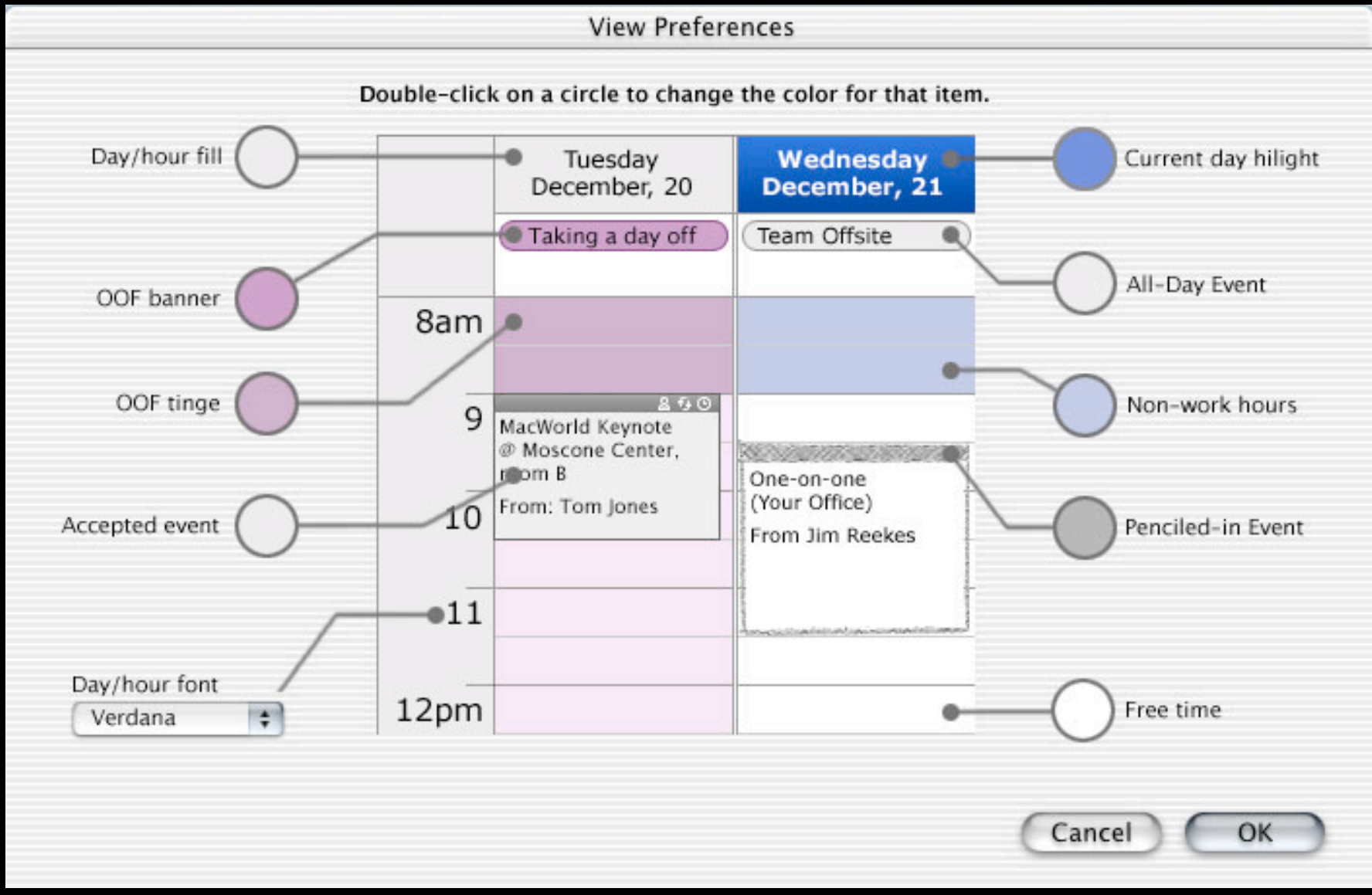

Ivor Clarke / Proposals / TZ: USA Mountain
Type
Title
Date
Active Proposals
Discuss design plan
Sat, 11:00 AM 5/4/02
Go over weekly status
Fri, 1:00 PM 5/3/02
MM Training - Morning Admin Training...
Thu, 8:00 AM 4/25/02
Review Quarterly Sales Results
Fri, 11:00 AM 5/3/02
To-Do Proposals
Your Proposals
Staff rotation anouncements
Mon, 12:15 PM 5/6/02
Your Refusals
CC Proposals
CC To-Do Items
Ivor Clarke, Quake, TZ: USA Mountain
Thu, 1:43 PM 5/2/02


Proposals
Accept
Refuse
Pencil In
Delete
Less
Incoming Proposals
One-on-one
From Jim Reekes
2:30pm Thursday Dec 20, 2001
Server maintenance
From Harry David
6:00pm Tomorrow
This meeting conflicts with another.
Complete Dobson Report
From John Thomas
High Priority
Your Proposals
Global Reivew
Jim Reekes and 2 others refused
Jim Reekes: This conflicts with my weekly team meeting.
Tom Green: Could we do 1:00 instead?
(all comments)
Product Demo
All guests can attend


Meeting Proposal by Ivor Clarke / TZ: USA Mountain
Proposal
Guests
Schedule
Agenda
Options
Comments
Date:
Mon
5 / 6 / 02
Auto-Pick
Time:
9 : 30 AM
Duration:
1 : 45
Frequency...
Monday, May 6, 2002 9:30 AM to 11:15 AM
Guests:
6 AM
7 AM
8 AM
9 AM
10 AM
11 AM
12 PM
1 PM
2 PM
3 PM
Benninga Michael
Clarke Ivor
Hart David
Jaroschewitz Thomas
Koutavas Jay
Roca Michael
Torvalds Linus
You can change any part of the meeting and resend this proposal.
Cancel Meeting
Notify Guests


Meeting: Untitled
Event Type
Meeting
Actions
Fill work day
Link a To-Do
Save as Template
Add a Resource
Email guests
Mark time as:
Busy
Title:
Schedule
Event
Comments
Tuesday, 12/18/01
9
10
11
12
1
2
3
4
5
9
10
11
All Guests
You
Adam Smith
Thomas Hobbes
Renee Descartes
Bob Thorpe
Bill Nye
Conf. Room A
click to add
Free
Busy
Penciled In
Non-work hours
Autopick
Workday
Cancel
Send Proposal


Preferences
Login
General
Notification
Calendar
Filters
Labels
Daily
Show 5 day(s).
Work days only
Twice normal size
Show Week Number
Split Overlapped Items
Open to: Today at 7 : 00 AM
Font: Geneva Size: 9
Monthly
Open to: Sunday
Work days only
Font: Geneva
Show event times
Banners
Display banners below the daily view
Font: Geneva Size: 9
Print in Black and White Only
Cancel
OK


View Preferences
Double-click on a circle to change the color for that item.
Day/hour fill
OOF banner
OOF tinge
Accepted event
Day/hour font
Verdana
Tuesday
December, 20
Wednesday
December, 21
Taking a day off
Team Offsite
8am
9
10
11
12pm
MacWorld Keynote
@ Moscone Center,
From: Tom Jones
One-on-one
(Your Office)
From Jim Reekes
Current day hilight
All-Day Event
Non-work hours
Penciled-in Event
Free time
Cancel
OK

Reaction

- Huge amount of energy across the organization
- Customer and end-user excitement

John Geleynse
User Experience Evangelist

MICROTEK

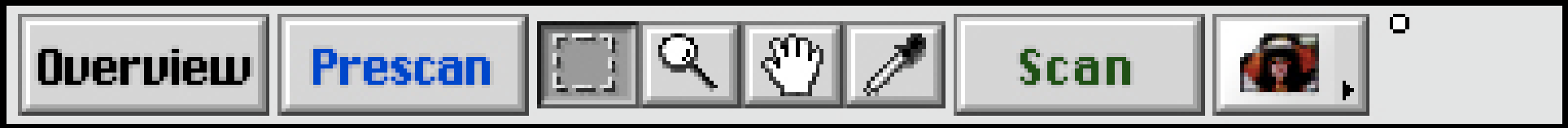
Kristin Lee
Marketing Project Manager
Microtek Lab, Inc.

The Initial Plan

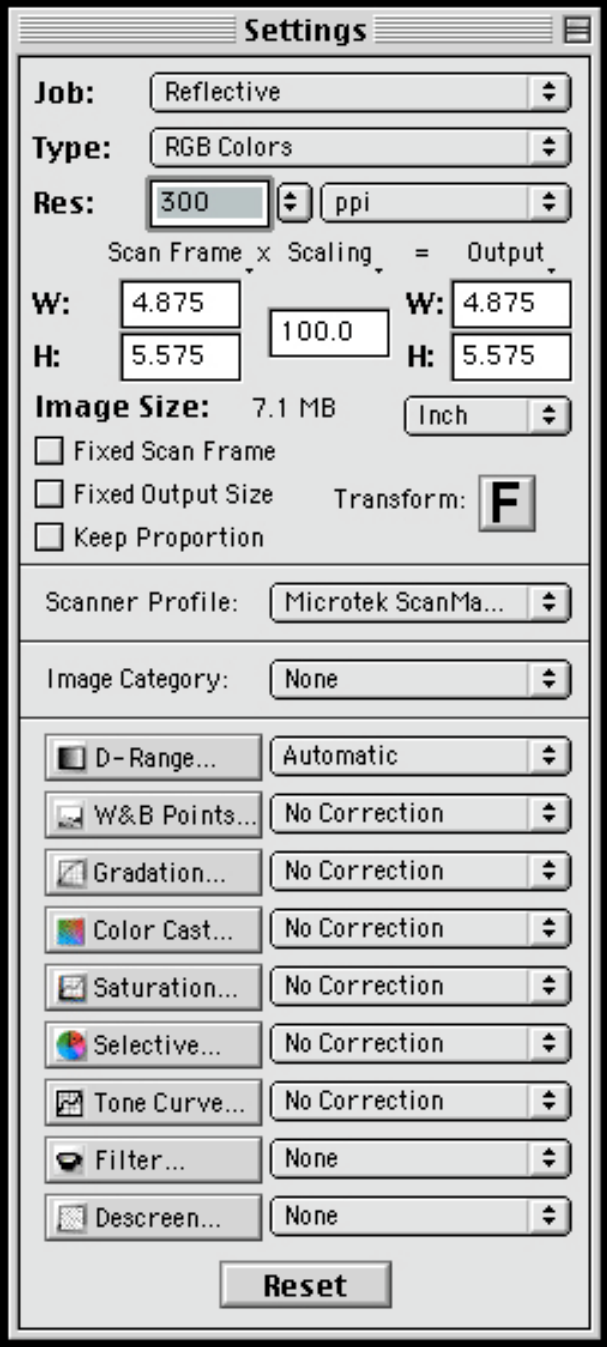
- Port to Carbon
- Add Aqua Icons
- Ship it!

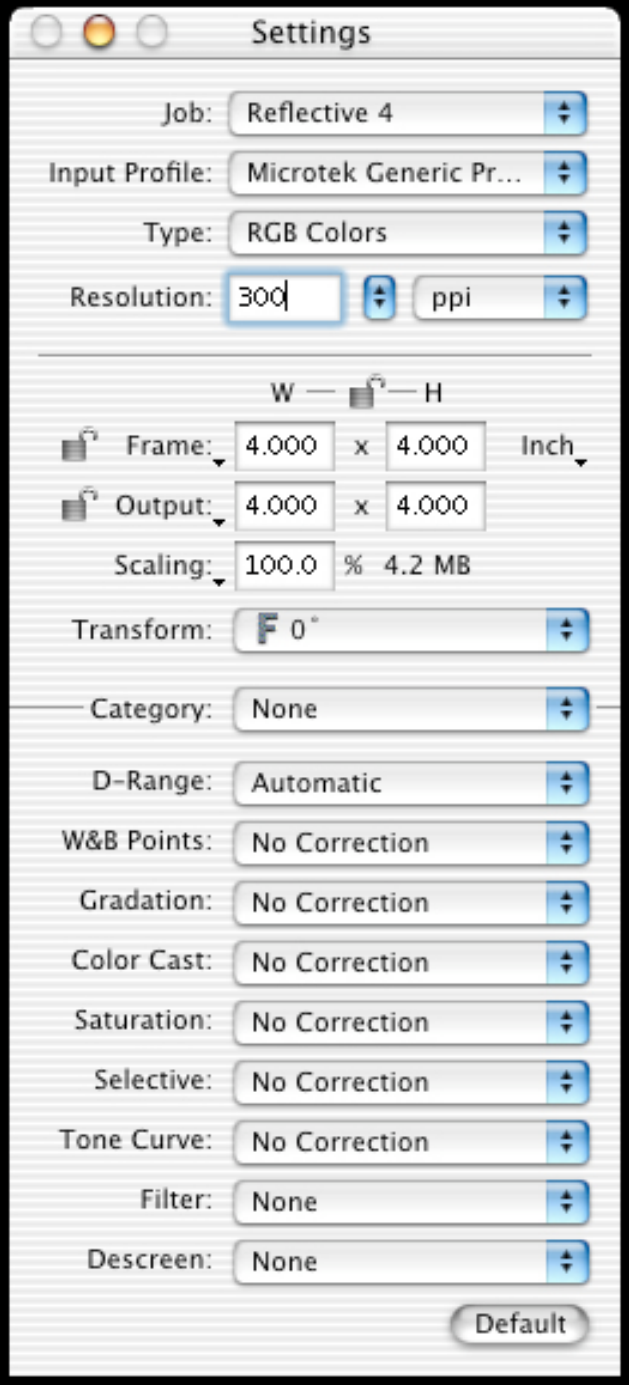
ScanWizard Pro 6

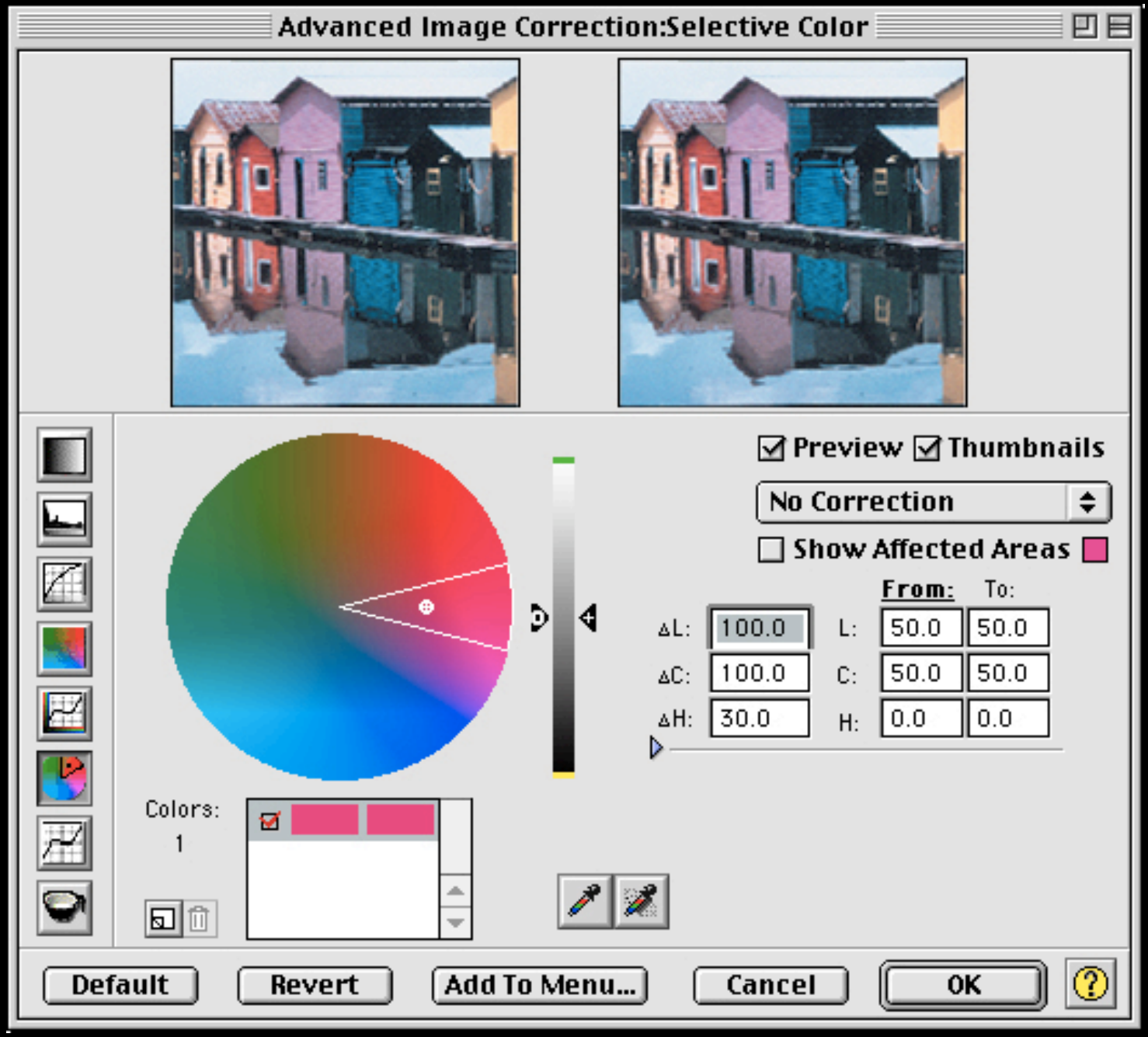
ScanWizard Pro 7.0

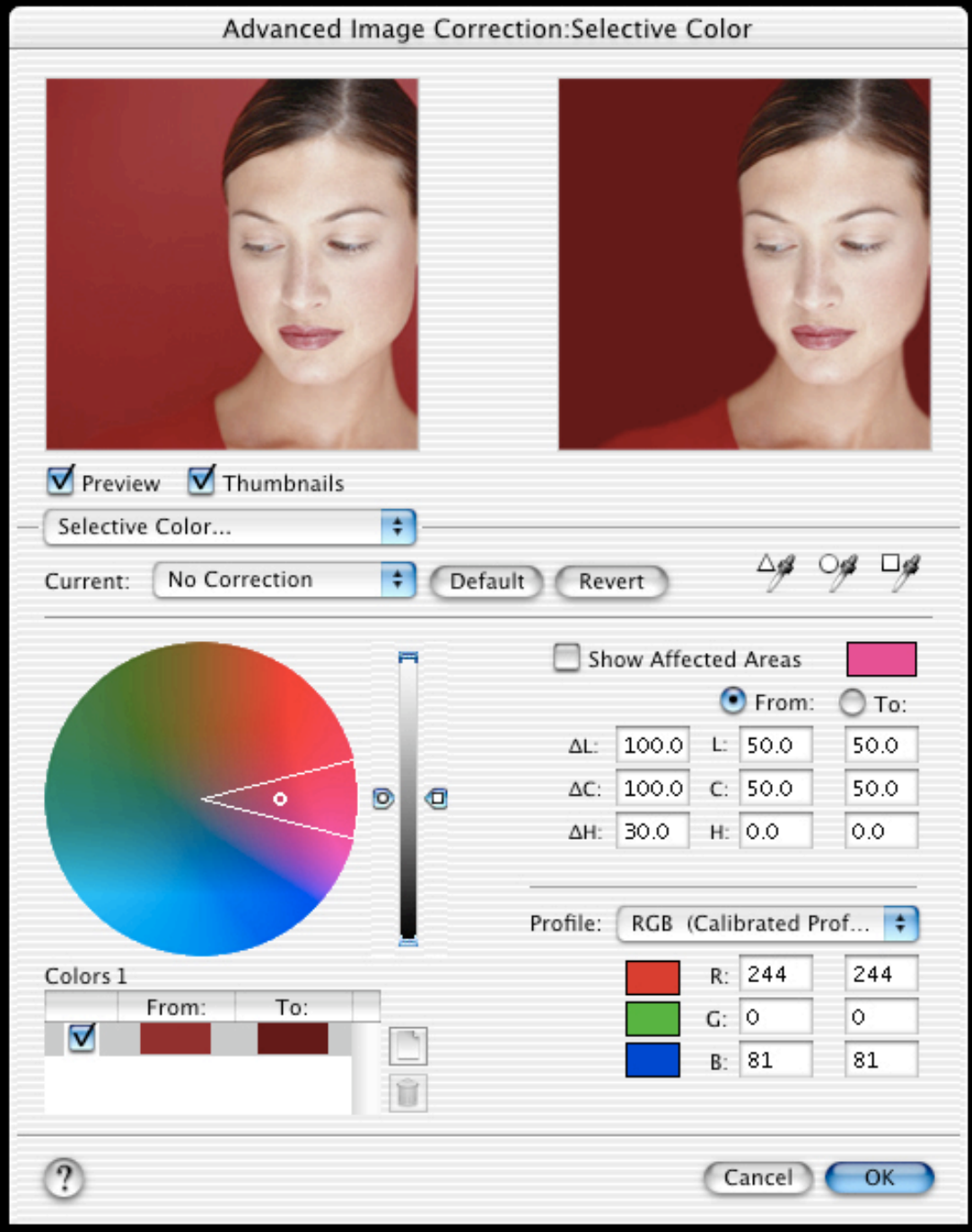

Overview
Prescan
Scan

Reflective
Overview
Prescan
Scan


Settings
Job:
Reflective
Type:
RGB Colors
Res:
300
ppi
Scan Frame
x
Scaling
=
Output
W:
4.875
H:
5.575
100.0
W:
4.875
H:
5.575
Image Size:
7.1 MB
Inch
Fixed Scan Frame
Fixed Output Size
Keep Proportion
Transform:
F
Scanner Profile:
Microtek ScanMa...
Image Category:
None
D-Range...
Automatic
W&B Points...
No Correction
Gradation...
No Correction
Color Cast...
No Correction
Saturation...
No Correction
Selective...
No Correction
Tone Curve...
No Correction
Filter...
None
Descreen...
None
Reset


Settings
Job:
Reflective 4
Input Profile:
Microtek Generic Pr...
Type:
RGB Colors
Resolution:
300
ppi
W
H
Frame:
4.000
x
4.000
Inch
Output:
4.000
x
4.000
Scaling:
100.0
%
4.2 MB
Transform:
0°
Category:
None
D-Range:
Automatic
W&B Points:
No Correction
Gradation:
No Correction
Color Cast:
No Correction
Saturation:
No Correction
Selective:
No Correction
Tone Curve:
No Correction
Filter:
None
Descreen:
None
Default


Advanced Image Correction:Selective Color
Preview
Thumbnails
No Correction
Show Affected Areas
From:
To:
ΔL:
100.0
L:
50.0
50.0
ΔC:
100.0
C:
50.0
50.0
ΔH:
30.0
H:
0.0
0.0
Colors:
1
Default
Revert
Add To Menu...
Cancel
OK


Advanced Image Correction:Selective Color
Preview
Thumbnails
Selective Color...
Current:
No Correction
Default
Revert
Show Affected Areas
From:
To:
ΔL: 100.0
L: 50.0
50.0
ΔC: 100.0
C: 50.0
50.0
ΔH: 30.0
H: 0.0
0.0
Profile:
RGB (Calibrated Prof...
Colors 1
From:
To:
R: 244
244
G: 0
0
B: 81
81
Cancel
OK

The End Result

- Higher internal moral
- Increased visibility within Apple
- Excited Mac community
- Increased sales

John Geleynse
User Experience Evangelist

Is *your* application
a good citizen?

Citizenship

Noun

1. The status of a citizen with benefits and responsibilities
2. Conduct as a citizen; “award for good citizenship”

Meet the best citizens!

Apple
Design
Awards

Tonight. 6:30 pm. Hall 2. Don’t miss them!

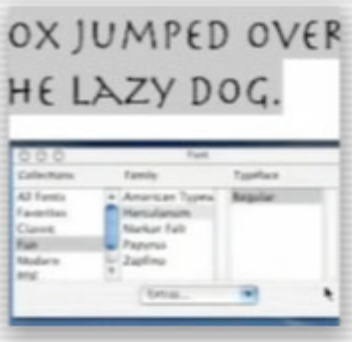
Roadmap

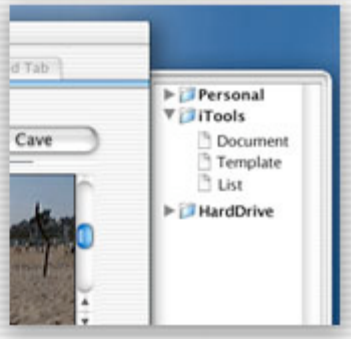
001 User Experience: Interface Design Principles	Hall 2 **Tue., 9:00am**
009 Accessibility Overview	Room A2 **Thurs., 2:00pm**
203, 204, 205, 206, 207 HI Toolbox and Carbon Events Sessions	Hall 2 **Tue. and Wed.**
209 Accessibility and Carbon	Room A2 **Thurs., 3:30pm**
304 Cocoa Controls and Cocoa Accessibility	Room A2 **Thurs., 5:00pm**

Roadmap

012 Address Book Framework	Room C **Fri., 3:30pm**
013 Speech Technologies in Mac OS X	Room A2 **Fri., 5:00pm**
904 Using Interface Builder	Hall 2 **Thurs., 3:30pm**
004 System Prefs, Screen Saver, Disk Image, and Installers	Room C **Tue., 2:00pm**
FF004 Aqua	Room J1 **Thurs., 9:00am**
FF005 Toolbox	Room J1 **Thurs., 10:30am**

Q&A





John Geleynse
User Experience Evangelist
geleynse@apple.com

http://developer.apple.com/wwdc2002/urls.html

WWDC2002

WWDC2002

WWDC2002